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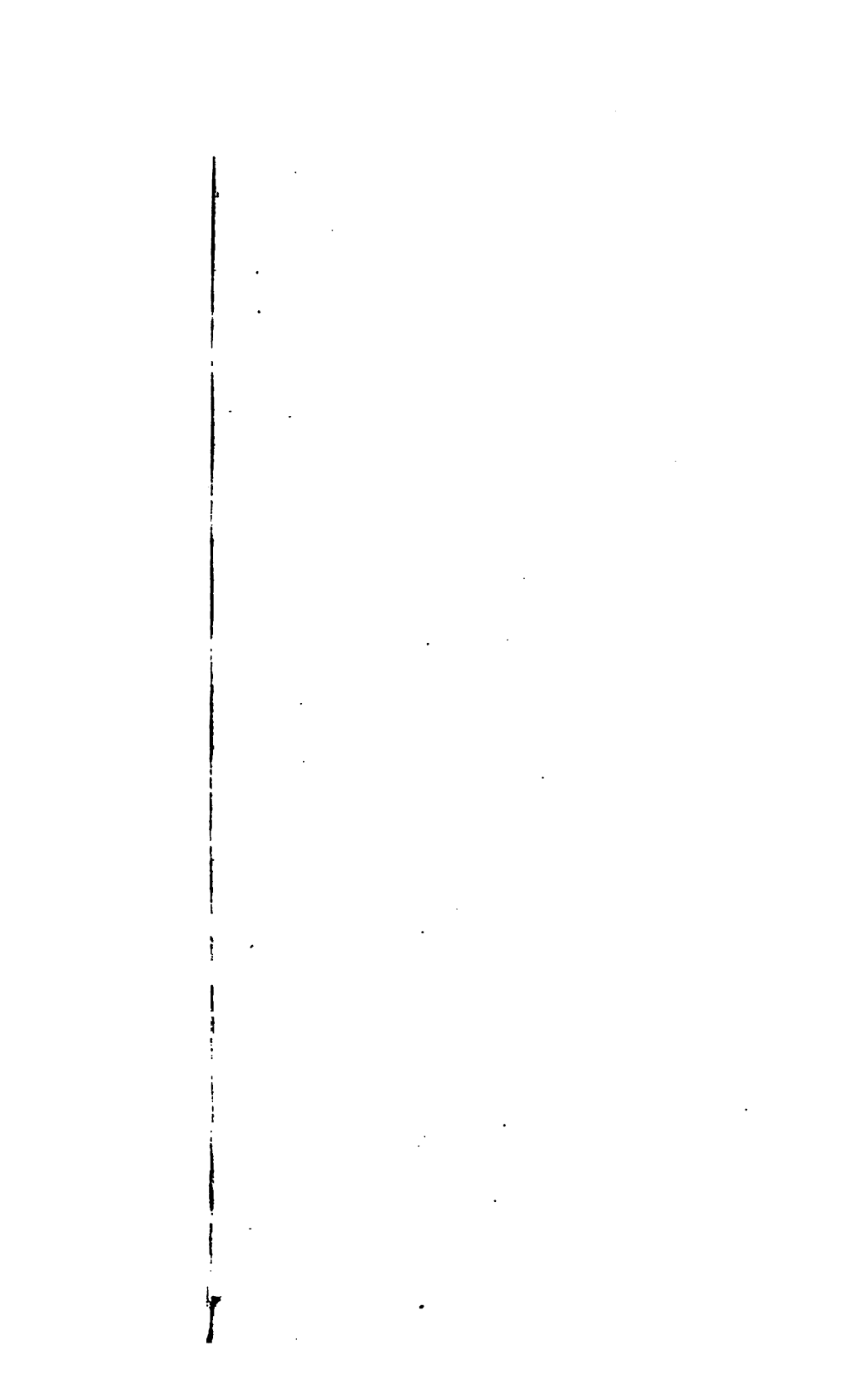




Spring

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THIRTY-SECOND ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

SPRINGFIELD, December 26, 1900.

*To the City Council:—*

A statement of receipts and expenditures and of work completed by the Street Department during the year ending December 10, 1900, is herewith presented for your consideration.

Appropriations and receipts amounting to \$228,774.32 have enabled the completion of a quantity of work far in excess of that heretofore accomplished in any single year.

The expressed wish of the Committee on Finance and the Board of Supervisors of Highways and Bridges, that so far as possible, the season's work should be done by day labor, was particularly pleasing as it guaranteed to its citizens a preference in the distribution of labor and in the purchase of materials. Comparison of costs of this season's construction shows that the city has not done its own work at a loss.

SUMMARY OF CONSTRUCTION.

Gravel roadways,.....	24,180 square yards.
Macadam roadways,.....	75,131 square yards.
Macadam resurfacing,.....	38,049 square yards.
New crosswalks,.....	75
Brick pavements,.....	16,834 square yards.
Asphalt pavements,.....	3,029 square yards.
Brick sidewalks (new),.....	3,431 feet in length.
Tar concrete sidewalks,.....	3,311 feet in length.



new macadam, can the practice of intermittent patching of roadways, a most unsatisfactory makeshift, be eliminated. Expenditure of moneys for this purpose will afford more satisfaction to the general public, than a corresponding amount invested in any other way.

### BRICK AND ASPHALT PAVEMENTS.

Four streets have been paved by day labor, with brick, whose combined length is 5,009 feet. Three streets, 906 feet in length, have been paved with Sicilian asphalt, by contract. It has been very gratifying to construct so much pavement in streets which heretofore have been noted for particularly poor surfaces, an explanation for which lies in the fact that the road material used has been unsuitable. The ordinary roadway thirty feet in width, in which street railway tracks are located, is not adapted either to gravel or to macadam wearing surface. Such conditions require brick, asphalt, or wood block and a selection of one of these should be made only after a careful consideration of the amount of traffic to which the street will be subjected, and with due regard to the occupants of those lands abutting upon such thoroughfare. At the suggestion of the City Engineer, the concrete base for the above brick pavements has a somewhat greater proportion of cement than heretofore, and while the cost of raw materials has been appreciably increased thereby, the base is correspondingly improved in quality.

The average cost per square yard for brick pavement, exclusive of inlets and including grading, cost of all materials and labor, has been \$2.36 and it is with a feeling of pardonable pride that the cost is referred to, especially when it is considered that a richer concrete has been laid, the working day has been one hour shorter than heretofore, and the most expensive and best brick filler has been used in three of the streets, the fourth street, subjected to but little traffic, did not require so expensive filler.

## SIDEWALKS.

Sidewalk construction has been carried on in an amount in excess of that of the immediately preceding years. There still remains a vast amount of such work to be done and it is hoped that the appropriation for sidewalks may be increased rather than diminished. The Board of Public Works has recommended the construction of tar and cement concrete walks in many places as well as brick, and while each style of construction serves best its particular locality, too much cannot be said in favor of the cement concrete walk. Acknowledging that its cost exceeds that of the other two styles, its superiority over the others is most marked. Its one bad quality, slipperiness, can be overcome by proper workmanship and materials.

Opportunity is herewith taken to announce that the sewer on the west side of Main street between Emery and Sargeant streets has been reconstructed by the Sewer Department, for the purpose of allowing complete settlement of all materials, and the construction of permanent pavement. The building of sewers under ideal conditions demands that there shall be no opening of streets for at least one year previous to their completion.

Rounding of street intersections with curb circles of small radius has improved the appearance of many of our streets and has added to the convenience of the vehicle traveler.

The Buckland device has been attached to the street car track in South Main street, thereby converting it into a full groove rail and making a great improvement.

The North End Bridge surface has been improved by the Street Railway Company, in the substitution of the original T rail for the new.

The proper enforcement of laws governing the use of draft wagons, passed by the Massachusetts

session of 1900 to go into effect in 1901, will relieve our highways of one of their chief destructive elements.

The adoption of cement concrete curb and gutter in combination, which has been used with favor in some of the larger cities, is suggested. Its wearing qualities are said to be excellent and from the standpoint of appearance it is first.

Some excellent qualifications are possessed by properly treated wood blocks and they will demand consideration in the solving of the ideal pavement question.

It is recommended that lands, to be devoted to yard purposes, be purchased in various parts of the city. The saving in moving materials alone would be enough to warrant such an expenditure and other direct benefits would immediately result.

Your attention is called in particular to the unsatisfactory condition of Main street, now paved with granite blocks which have long since outlived their usefulness. A necessity for such street surface is not apparent and appropriations should be forthcoming in the near future to abate the disgrace.

Your attention is especially directed to the pernicious practice of opening of streets by the various corporations having underground structures therein. Certain restrictions have been imposed upon one of such companies and it is hoped that ordinances may be soon framed which will impose like, if not more stringent, restrictions upon the others.

It gives me pleasure to express my thanks to Mr. Michael Roane, Assistant Superintendent of Streets and Sewers, for the valuable assistance rendered by him. I would also express my sense of gratitude to the Board of Supervisors of Highways and Bridges for the courteous treatment accorded me by its members at all times.



## GRADING AND GRAVELING

Cleveland street,.....	
Lowell street,.....	
Orange street,.....	
Pasco street, completion of work undertaken in 1899,	
Washburn street,.....	
Willard avenue,.....	
Total, .....	

## MACADAM.

Adams street, Main to Ashmun,.....	8
Arbor street, Carew to Butler,.....	2
Armory street, Federal to Worthington,.....	1
Bond street, Main to Chestnut,.....	1
Butler street, Chestnut street to Mayo's property, .....	2
Cedar street, Ashley to Walnut,.....	4
Everett street, Chestnut street to Mayo's property, .....	4
Lebanon street, Walnut street to Eastern ave.,..	1
Loring street, Main to Water,.....	2
Main street, I. O., Oak to Pine,.....	2
Marble street,.....	2
Oak street, I. O., Main to Worcester,.....	2
Osgood street, Main to North,.....	2
Pendleton ave., Walnut street to Eastern ave.,..	0
Sargeant street, Main to Fulton,.....	2
Sharon street, Main to Chestnut,.....	2
Stearns Park street, easterly side Bridge to Worthington, .....	
St. James avenue, widening at Benton Park,..	
Sumner avenue, Long Hill street to Park entrance, .....	11
Vinton street, Liberty to Franklin,.....	2
Wilbraham road, N. E. R. R. to Westford ave.,..	2
Total, .....	71
Of this amount \$849.25 is chargeable to the Street	

## MACADAM RESURFACING.

	Sq. yds.	Cost.
Bond street, Main street to engine house,.....	445	\$146 90
Central street, Maple to Cedar,.....	1,889	375 93
Cypress street,.....	2,420	378 43
Hancock street, State to Lebanon,.....	7,200	1,193 98
Liberty street, 240 feet east from Main street...	1,000	193 06
Locust street,.....	1,166	264 28
Maple street, State to Central,.....	3,730	1,158 86
North Main street, Carew street to Jefferson avenue, .....	6,396	1,145 41
Plainfield street, Bradford street to B. & M. railroad, .....	4,833	822 58
Sharon street, Chestnut street westerly,.....	792	78 04
State street, Spring street to Olivet Church,...	1,944	152 96
Walnut street, King street to Hickory street...	2,411	752 36
Water street, Bridge street to Railroad row...	3,823	318 27
Total, .....	38,049	\$6,981 06

Of this amount, \$1,347.22 is chargeable to the Street Railway Company and \$145.13 to other parties.

The following table shows the length and square yards of macadamized streets, together with the square yards of cobblestone gutters laid in connection with the macadam:—

NAME OF STREETS.	Length in feet.	Macadam in sq. yds.	Gutters, sq. yds.
Acushnet avenue,.....	1,088	3,385	
Adams street,.....	1,003	3,193	133
Alden street,.....	2,116	*7,106	
Allen street,.....	923	*3,172	336
Allendale street,.....	663	2,094	
Arbor street,.....	437	1,222	
Armory street,.....	793	3,240	
Ashley street,.....	1,378	4,592	
Barnes street,.....	180	561	
Bay street,.....	4,053	12,960	
Belmont avenue,.....	220	1,139	45

NAME OF STREETS.	Length in feet.
Bliss street,.....	958
Bond street,.....	1,629
Boylston street,.....	1,807
Bradford street,.....	120
Bridge street,.....	1,310
Broad street,.....	959
Brookline avenue,.....	615
Butler street,.....	1,525
Byers street,.....	480
Carew street,.....	2,618
Cedar street,.....	1,962
Central street,.....	4,903
Charles street,.....	618
Chestnut street,.....	3,889
Church street,.....	832
City Hall passageways,.....	557
Clarendon street,.....	204
Clinton street,.....	703
Congress street,.....	1,550
Court street,.....	689
Cross street,.....	608
Cypress street,.....	651
Dale street,.....	812
East Court street,.....	369
Eastern avenue,.....	4,516 *
Elliott street,.....	1,007
Elm street,.....	220
Elmwood street,.....	886
Emery street,.....	648
Essex street,.....	1,606
Everett street,.....	1,500
Federal street,.....	353
Ferry street,.....	1,357
Florence street,.....	1,582
Fort Pleasant avenue,.....	2,794
Franklin street,.....	1,863
Fremont street,.....	778
Fulton street,.....	1,169
Gardner street,.....	1,114

# REPORT ON STREETS.

adam q. yds.	Gutters, sq. yds.	NAME OF STREETS.	Length in feet.	M in
418	635	George street,.....	110	
112		Hampden street,.....	607	
864		Hancock street,.....	3,104	*1
449	14	Hillman street,.....	647	
566	1,189	Howard street,.....	1,277	
177		Hubbard avenue,.....	568	
050		King street,.....	2,286	*
223	662	Lebanon street,.....	1,926	
088	105	Liberty street,.....	1,008	
373	2,299	Linden street,.....	1,287	
313	42	Locust street,.....	793	
357	2,475	Lombard street,.....	590	
388		Loring street,.....	707	
156	1,509	Lyman street,.....	734	
533		Madison avenue,.....	529	
004	16	Main street,.....	2,398	
074		Main street, I. O.,.....	559	
42		Maple street,.....	3,721	
53	165	Marble street,.....	1,074	
92	560	Market street,.....	961	
12	504	Mattoon street,.....	524	
46	105	Mill street,.....	1,574	
73	78	Morgan street,.....	852	
08	247	Morris street,.....	282	
97		Mulberry street,.....	991	
31	661	North street,.....	2,988	1
33		North Main street,.....	7,115	2
38		Oak street,.....	1,344	
41	565	Oak street, I. O.,.....	352	
43		Olive street,.....	478	
46	803	Osgood street,.....	890	
0		Palmer avenue,.....	991	
0	1,171	Park street,.....	865	
3		Patton street,.....	1,631	
0	908	Pearl street,.....	1,220	
5	1,221	Pendleton avenue,.....	2,582	
3		Pine street,.....	4,420	1
1	107	Plainfield street,.....	2,206	
3		Pyncheon street,.....	868	

NAME OF STREETS.	Length in feet.
St. James avenue,.....	4,147
Salem street,.....	522
Sanford street,.....	367
Sargeant street,.....	860
School street,.....	900
Sharon street,.....	1,200
South street,.....	1,863
Spring street,.....	2,373
State street,.....	11,601 *
Stearns Park avenue,.....	259
St. James avenue,.....	94
Stockbridge street,.....	635
Summer street,.....	567
Sumner avenue,.....	3,215
Taylor street,.....	1,183
Tenth street,.....	1,577
Thompson street,.....	756
Townsley avenue,.....	138
Union street,.....	3,617
Vernon street,.....	823
Vine street,.....	745
Vinton street,.....	612
Walnut street,.....	3,142
Warriner avenue,.....	450
Water street,.....	5,145
Waverly street,.....	450
West street,.....	1,195
White street,.....	190
Wilbraham road,.....	1,600
Wilcox street,.....	92
William street,.....	1,36
Willow street,.....	89
Worthington street,.....	5,52
York street,.....	1,00
Total, .....	181,1

\* Includes macadam laid by Street Railway Company.



The following table shows the length and square yards of paved streets to date:—

	Length in feet.	Sq. yds
Bridge street, Main to Dwight, rock asphalt (1900),	688	2,522
Catharine street, State to Bay, Syracuse brick (1900), .....	1,722	5,691
Chestnut street, northerly from Lyman street, gran- ite blocks (1889), .....	256	1,471
Chestnut street, north from B. & A. R. R. to Linden street, granite blocks (1892), .....	1,640	5,233
Chestnut street, north from Linden to Carew, gran- ite blocks (1893), .....	773	2,156
Chestnut street, Carew to Allendale, Syracuse brick (1900), .....	1,015	3,433
Chestnut street, Lyman to Worthington, granite blocks (1895), .....	472	1,673
Court street, westerly from Main street, rock asphalt (1897), .....	317	1,277
Court street, easterly from Court Square avenue, Syracuse brick (1897), .....		174
Court Square avenue, Court to Elm, rock asphalt (1897), .....	193	503
Court Square avenue, Court to Elm, Syracuse brick (1897), .....		330
Dwight street, State to Lyman, Syracuse brick (1896), .....	2,324	9,903
East Court street, Main to Market, rock asphalt (1900), .....	117	297
Elm street, westerly from Main street, rock asphalt (1897), .....	343	943
Elm street, Main street to Court Square avenue, Syracuse brick (1897), .....		330
Fort street, Main to Water, granite blocks (1895), ..	670	1,770
Harrison avenue, Main street to Dwight, Trinidad asphalt (1896), .....	586	2,247
Liberty street, Chestnut to Cass, Syracuse brick (1900), .....	1,399	4,571
Lyman street, Main to Chestnut, granite blocks (1889), .....	1,305	4,593

	Length in feet.
Main street, north side, Elm to Court, granite blocks (1887), .....	
Main street, State to Bridge, granite blocks (1888),..	1,550
Main street, Bridge to Lyman, granite blocks (1889),	787
Main street, Lyman to Liberty, granite blocks(1890),	427
Main street, Liberty to Cypress, granite blocks (1890), .....	327
Main street, State street junction, granite blocks (1896), .....	80
Main street, Lyman to State between R. R. tracks, granite blocks (1890),.....	
Main street, Cypress to Emery, granite blocks(1891),	650
Main street, east side, from end of granite block pav- ing, to Carew, Syracuse brick (1897),.....	1,302
Main street, State to Bliss, Syracuse brick (1893),..	235
Main street, Bliss to William, granite blocks (1893),	1,148
Main street, William to Marble, Syracuse brick (1896), .....	1,762
Main street, Marble to Locust, Syracuse brick(1897),	840
Sanford street, Main to Market, rock asphalt (1900),	106
School street, State to High, Syracuse brick (1892),..	51
State street, Main to Library, granite blocks (1890),	1,01
State street, Dwight to Chestnut, widened, granite blocks (1896),.....	
State street, Federal to Oak, Syracuse brick (1897),..	
Summer street, Autumn to Kibbe avenue, granite blocks (1895),.....	
Walnut street, State to Union, Syracuse brick(1899),	
Walnut street, Union to Pendleton avenue, Syracuse brick (1900),.....	
Worthington street, Main to Dwight, Syracuse brick (1896), .....	
Total, .....	

### NEW CROSSWALKS.

Seventy-five new crosswalks have been  
106,100 common brick were used and 19,200

## NEW GUTTERS.

	Sq. yds
Armory street, cobblestone, . . . . .	606
Lexington avenue, cobblestone, . . . . .	318
Mill street, cobblestone, . . . . .	198
Springfield street, cobblestone; . . . . .	74
State street, cobblestone, . . . . .	50
Vinton street, cobblestone, . . . . .	427
Total, . . . . .	1,673

## BRICK PAVING.

	Sq. yds.	Cost.
Catharine street, State to Bay, . . . . .	5,691	\$13,010 51
Chestnut street, Carew to Allendale, . . . . .	3,432	8,437 79
Liberty street, Chestnut to Cass, . . . . .	4,571	10,179 31
Walnut street, Union street to Pendleton ave., . . . . .	3,140	7,795 03
Total, . . . . .	16,834	\$39,422.64

Of this amount, \$11,348.78 is chargeable to the Street Railway Company.

## ASPHALT PAVING.

	Sq. yds.	Cost.
Bridge street, Main to Dwight, . . . . .	2,525	\$8,235 79
East Court street, Main to Market, . . . . .	297	952 28
Sanford street, Main to Market, . . . . .	207	681 68
Total, . . . . .	3,029	\$9,869.75

## COMBINED STREET EXPENDITURES.

Those streets on which a sum less than \$20 has been expended are included in "Sundry Streets."

	Cost.
Adams street, macadam, crosswalk, paving gutter and gravel repairs, . . . . .	\$1,916 95
Allen street, crosswalks, inlet, macadam, gravel and general repairs, . . . . .	1,716 12
Arbor street, macadam, crosswalks and general repairs, . . . . .	757 13



Armory street, macadam, inlet, crosswalks, paving gutter, repaving gutters, macadam, gravel, and general repairs, .....	\$3,039
Bancroft street, gravel and general repairs,.....	72
Barnes street, macadam repairs,.....	52
Bay street, crosswalk, crosswalks relaid, macadam, gravel, and general repairs,.....	552
Belmont avenue, crosswalks, inlets, repaving gutters, macadam, gravel, and general repairs,.....	866
Berkshire street, I. O., gravel and general repairs,.....	509
Bond street, macadam, crosswalk, gravel, and general repairs, .....	2,886
Boston road, gravel and general repairs,.....	600
Bowdoin street, gravel and general repairs,.....	32
Boylston street, crosswalk, macadam repairs,.....	26
Bridge street, asphalt, inlets, and macadam repairs,.....	8,454
Brookline avenue, macadam,.....	475
Buckingham street, gravel repairs,.....	45
Burcham Bend road, gravel and general repairs,.....	50
Burr street, crosswalk,.....	
Butler street, macadam, inlets, and general repairs,.....	1
Cambridge street, crosswalk and gravel repairs,.....	
Carew street, crosswalk relaid, macadam, gravel, and general repairs,.....	
Cass street, crosswalk, crosswalk relaid, gravel, and general repairs,.....	
Catharine street, brick, inlets, and gravel repairs,.....	
Cedar street, macadam and gravel repairs,.....	
Central street, macadam repairs,.....	
Chestnut street, brick, inlets, crosswalks, crosswalks relaid, macadam, gravel, and general repairs,.....	
Clarendon street, gravel repairs,.....	
Cleveland street, grading and graveling,.....	
Clinton street, macadam repairs,.....	
College street, general repairs,.....	
Cooley street, gravel and general repairs,.....	
Colton street, gravel repairs,.....	
Cornell street, crosswalk and gravel repairs,.....	
Court street, repaving gutters, macadam, and general repairs, .....	

# REPORT ON STREETS.

		Cypress avenue, crosswalk,.....
		Cypress street, crosswalks relaid, repaving gutters, macadam, and general repairs,.....
\$3,039	07	
72	28	Dartmouth street, gravel repairs,.....
52	99	Dickinson street, crosswalks and gravel repairs,.....
		East Court street, asphalt, inlets, and macadam repairs,.
552	86	Eastern avenue, macadam repairs,.....
		Euclid avenue, inlets, gravel, and general repairs,.....
866	19	Everett street, macadam, paving gutters, crosswalks relaid, and general repairs,.....
509	71	
		Fairfield street, crosswalk,.....
2,886	84	Florida street, gravel and general repairs,.....
600	68	Fort Pleasant avenue, macadam and gravel repairs,....
32	26	Franklin street, macadam and general repairs,.....
26	96	Fulton street, crosswalks, crosswalks relaid, macadam, and gravel repairs,.....
8,454	87	
475	00	Garfield street, crosswalk and gravel repairs,.....
45	63	Gray's avenue, crosswalk,.....
508	29	Greene street, gravel repairs,.....
23	15	Hall street, gravel repairs,.....
1,532	00	Hampden street, macadam repairs,.....
33	43	Hampden street, I. O., crosswalk, inlets, gravel, and general repairs,.....
		Hancock street, crosswalks relaid, macadam, gravel, and general repairs,.....
84	06	
66	79	Hickory street, gravel repairs,.....
13,245	61	Highland street, gravel repairs,.....
2,648	07	Hillman street, repaving gutters and macadam repairs,.
428	32	Ingersoll grove, macadam and gravel repairs,.....
		James street, gravel repairs,.....
9,162	18	Lebanon street, macadam,.....
29	56	Lexington avenue, paving gutters and gravel repairs,....
964	35	Leyfred terrace, crosswalks,.....
21	29	Liberty street, brick, inlets, crosswalks, repaving gutters, macadam, gravel, and general repairs,.....
51	88	
89	17	Locust street, macadam repairs,.....
41	08	Long Hill street, crosswalk, macadam, gravel, and general repairs,.....
50	18	
		Loring street, macadam,.....
31	99	

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Lowell street, grading, graveling, gravel, and general repairs, .....	
Lyman street, macadam, gravel, and general repairs	
Magazine street, gravel repairs,.....	
Main street, crosswalk, crosswalks relaid, repairs, gutters, .....	
Main street, I. O., macadam, grading, crosswalks relaid, gravel, and general repairs,.....	
Manhattan street, crosswalk and gravel repairs,....	
Maple street, crosswalk relaid, macadam, and general repairs, .....	
Marble street, macadam, inlets, crosswalk, and general repairs, .....	
Market street, crosswalks relaid, repaving gutters, macadam, and general repairs,.....	
Melrose street, general repairs,.....	
Mill street, paving gutters, repaving gutters, macadam, gravel, and general repairs,.....	
Monmouth street, repaving gutters and gravel repairs	
Monroe street, gravel repairs,.....	
Montmorenci street, gravel repairs,.....	
Mulberry street, repaving gutters, gravel, and general repairs, .....	
Myrtle street, I. O., gravel repairs,.....	
North Main street, crosswalks, repaving gutters, macadam repairs,.....	
Norwood street, macadam repairs,.....	
Oak street, I. O., macadam, grading, crosswalks relaid, repaving gutters, gravel, and general repairs,....	
Oakland street, gravel repairs,.....	
Old Bay road, I. O., gravel and general repairs,....	
Orange street, grading, graveling, crosswalks, and general repairs, .....	
Orleans street, gravel repairs,.....	
Osgood street, macadam, crosswalk, and macadam repairs, .....	
Park avenue, macadam repairs,.....	
Park street, macadam repairs,.....	
Parker street, I. O., gravel and general repairs,.....	



# REPORT ON STREETS.

al re-			Pasco street, I. O., grading, graveling, paving gutters
.....	\$945	04	gravel repairs,.....
.....	82	78	Passageway, rear of City Hall, macadam repairs,...
.....	26	35	Pendleton avenue, macadam, gravel, and general rep
aving			Pine street, macadam repairs,.....
.....	2,186	68	Pine street, I. O., inlets, gravel repairs,.....
elaid,			Plainfield street, crosswalks, crosswalks relaid, maca
.....	2,109	79	gravel, and general repairs,.....
.....	27	18	Plumtree road, gravel and general repairs,.....
al re-			Princeton street, gravel repairs,.....
.....	1,631	80	Quincy street, crosswalk and gravel repairs,.....
al re-			Sanford street, asphalt, inlets, crosswalks relaid, repa
.....	2,645	94	gutters, and macadam repairs,.....
mac-			Sargeant street, macadam, crosswalks, gravel, and
.....	204	45	eral repairs,.....
.....	26	50	Seventh street, gravel repairs,.....
adam,			Sharon street, macadam, paving gutters, and gravel
.....	127	01	pairs, .....
irs,...	21	77	Sherman street, gravel repairs,.....
.....	120	57	South street, macadam, gravel, and general repairs,.
.....	76	58	Spring street, macadam repairs,.....
al re-			Springfield street, paving gutters, gravel, and general
.....	90	57	pairs, .....
.....	55	18	State street, crosswalk, paving gutter, crosswalks rel
and			repaving gutters, macadam, gravel, and general
.....	1,703	48	pairs, .....
.....	26	40	Stearns Park street, macadam, inlets, and general
elaid,			pairs, .....
.....	1,275	34	Stebbins street, gravel repairs,.....
.....	375	01	St. James avenue, macadam, crosswalk, gravel, and
.....	36	32	eral repairs,.....
gravel			Summer street, repaving gutters, macadam, and gen
.....	2,195	57	repairs, .....
.....	29	93	Sumner avenue, macadam, inlets, crosswalks, gravel,
n re-			general repairs,.....
.....	2,049	79	Sundry streets (cleaning),.....
.....	64	46	Sundry streets (general repairs),.....
.....	21	48	Sundry streets (winter expenses),.....
.....	990	36	Thompson street, gravel repairs,.....

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Tinkham road, gravel and general repairs,.....	
Tyler street, gravel repairs,.....	
Union street, macadam, gravel, and general repairs,.....	
Vinton street, macadam, crosswalk, paving gutter and general repairs,.....	
Walnut street, balance of contract, 1899, brick, inlets, macadam, and general repairs,.....	
Warriner avenue, macadam repairs,.....	
Washburn street, grading and graveling,.....	
Water street, crosswalk, crosswalks relaid, macadam and general repairs,.....	
Waverly street, gravel repairs,.....	
Westford avenue, inlets and gravel repairs,.....	
Westminster street, gravel repairs,.....	
White street, macadam, gravel, and general repairs,.....	
Wilbraham road, macadam, inlets, crosswalks, gravel and general repairs,.....	
Willard avenue, grading and graveling,.....	
Willow street, crosswalk and macadam repairs,.....	
Winchester street, gravel and general repairs,.....	
Worcester street, I. O., inlets, crosswalk, crosswalks re- laid, gravel, and general repairs,.....	
Worthington street, crosswalk, crosswalks relaid, mac- adam, and general repairs,.....	
Yale street, gravel repairs,.....	
Total, .....	

The above expenditures are summarized as

Cleaning streets,	.	.	.	.
Repairs,	.	.	.	.
Winter expenses,	.	.	.	.
New construction,	.	.	.	.

## MAINTENANCE ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$50,000 00	
From Street Railway Company, corpora- tion tax, . . . . .	22,674 14	
From other departments and accounts and private parties, . . . . .	8,721 96	
	<u>\$81,396 10</u>	
Amount unexpended, . . . . .	422 61	
		<u>\$80,953 49</u>

## EXPENDITURES.

Bridges (small repairs), . . . . .	\$530 15	
City teams, . . . . .	2,104 38	
City yard, . . . . .	1,891 38	
Department and general expenses, . . . . .	2,295 45	
Material, . . . . .	62 25	
North End bridge, . . . . .	1,173 67	
Old Toll bridge, . . . . .	536 33	
Shed for steam rollers, . . . . .	220 74	
South End bridge, . . . . .	352 40	
Streets, . . . . .	60,669 51	
Superintendent's salary, . . . . .	1,800 00	
Tools, . . . . .	2,007 80	
Trap rock quarry, . . . . .	113 97	
Work and material for other departments and accounts, . . . . .	1,206 67	
Work and material for private parties, . . . . .	5,988 79	
		<u>\$80,953 49</u>

## MACADAM AND GRAVEL ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$50,000 00	
From contingent account, transferred, . . . . .	11,400 00	
From paving account, transferred, . . . . .	1,000 00	
From other departments, accounts and private parties, . . . . .	2,322 93	
	<u>\$64,722 93</u>	
Amount unexpended, . . . . .	86 25	
		<u>\$64,636 68</u>

## EXPENDITURES.

Department and general expenses,	\$128 35
Streets,	63,402 37
Tools,	435 95
Work and material for other departments and accounts,	2,296 21
	<u>\$66,394 15</u>
Less material and tools charged from in- ventory December 10th, 1900,	1,757 47

\$64

## PAVING ACCOUNT.

## RECEIPTS.

From appropriation,	\$50,000 00
From contingent account, transferred,	3,000 00
From other departments, accounts and private parties,	1,597 87
	<u>\$54,597 87</u>
Amount unexpended,	574 29

\$54

## EXPENDITURES.

Streets,	\$50,920 59
Tools, supplies, etc.,	494 05
Work and material charged to other de- partments and accounts,	886 48
Work and material charged to private parties,	749 17
	<u>\$53,050 29</u>
Transferred to macadam and gravel account,	\$1,000 00
Transferred to sidewalks and curbing account,	800 00
	<u>1,800 00</u>

54

Less material charged from inventory  
December 10th, 1900,

\$54

## SIDEWALKS.

Sidewalks have been laid in the following streets:—

Adams street (curbing),  
Allen street (tar concrete),  
Armory street,  
Bancroft street,  
Bay street (relaying),  
Belmont avenue (tar concrete),  
Catharine street (curbing)  
Chestnut street (relaying),  
College avenue (curbing),  
College street (tar concrete),  
Cypress street (relaying),  
Fisk avenue,  
Girard avenue (curbing),  
Highland street,  
Liberty street (relaying),  
Marble street (curbing),  
McKnight street (curbing),  
Mill street,  
North Main street (relaying),  
Oak street (curbing),  
Osgood street (relaying),  
Pyncheon street (relaying),  
Stearns Park street (relaying),  
Sumner avenue (tar concrete and brick),  
Talcott avenue,  
Union street (relaying),  
Waverly street (tar concrete),  
West street,  
Winthrop street (relaying),  
William street (curbing),

The cost of these walks chargeable to abutters was \$15,967.-70 for labor and material and 310,209 new brick have been used in their construction.



## CURBING.

The following table shows the sizes, quantities which new curbing has been set:—

LOCATION.	4" Length in feet.
Adams street, . . . . .	817
Allen street, . . . . .	2,007
Amory street, . . . . .	1,016
Bancroft street, . . . . .	723
Bay street, . . . . .	1,437
Beech street, . . . . .	10
Belmont avenue, . . . . .	642
Bridge street, . . . . .	32
Cass street, . . . . .	
Catharine street, . . . . .	514
Chestnut street, . . . . .	459
College avenue, . . . . .	1,565
College street, . . . . .	1,038
Cypress street, . . . . .	
East Court street, . . . . .	46
Everett street, . . . . .	
Fisk avenue, . . . . .	544
Florida street, . . . . .	202
Garfield street, . . . . .	72
Girard avenue, . . . . .	891
Highland street, . . . . .	607
Liberty street, . . . . .	
Litchfield street, . . . . .	97
Marble street, . . . . .	267
McKnight street, . . . . .	952
Mill street, . . . . .	
Morris street, . . . . .	150
Mulberry street, . . . . .	442
Oak street, . . . . .	430
Oak street, I. O., . . . . .	406
Osgood street, . . . . .	523
Stearns Park street, . . . . .	
Sumner avenue, . . . . .	827
Talcott avenue, . . . . .	878

# REPORT ON STREETS.

d streets in

Length  
in feet.

29

LOCATION.	4" Length in feet.	Le in
Walnut street, . . . . .		
Waverly street, . . . . .	565	
West street, . . . . .		
Wilbraham road, . . . . .	54	
William street, . . . . .	828	
Winthrop street, . . . . .	1,343	
Worcester street, I. O., . . . . .		
	20,384	1

In addition to the above, 15,959 feet of old c  
been reset.

## SIDEWALKS AND CURBING.

190

### RECEIPTS.

From appropriation, . . . . .	\$13,600 00
From contingent account transferred, . . . . .	2,000 00
From paving account transferred, . . . . .	800 00
From abutters for walks laid, . . . . .	11,657 42
	\$28,057 42
Less amount unexpended, . . . . .	289 18

927

199

132

### EXPENDITURES.

General expense, . . . . .	\$270 61
Services of City Engineer's assistants, . . . . .	580 26
Setting and resetting curbing not charge- able to abutters, . . . . .	7,914 86
Work and material not chargeable to abutters, . . . . .	792 75
Work and material chargeable to abutters, . . . . .	18,209 73

668

194

24

## SUMMARIZED ACCOUNTS.

### RECEIPTS.

Maintenance, . . . . .	\$81,396 10
Macadam and gravel, . . . . .	64,722 93
Paving, . . . . .	54,597 87
Sidewalks and curbing, . . . . .	28,057 42

102

78

## AMOUNTS UNEXPENDED.

Maintenance, . . . . .	\$142 61
Macadam and gravel, . . . . .	86 25
Paving, . . . . .	574 29
Sidewalks and curbing, . . . . .	289 18
	<hr/>

## EXPENDITURES.

Maintenance, . . . . .	\$80,953 49
Macadam and gravel, . . . . .	64,636 68
Paving, . . . . .	54,023 58
Sidewalks and curbing, . . . . .	27,768 24
	<hr/>

Property in the hands of the Superintendent of Sewers, December 10, 1900, amounts as per inventor  
471.04.

## NEW STREETS.

The following streets have been accepted as pub  
during the year:—

Brookline avenue, Chestnut to North, . . . . .  
 Bancroft street, Chestnut to North, widened from . . . . .  
 Butler street, Cass street easterly, . . . . .  
 Cass street, Linden to Butler, . . . . .  
 Everett street, Cass street easterly, . . . . .  
 Pecousic avenue, Mill river to George N. Vaughan's land,  
 Sumner avenue, extension and relocation, . . . . .  
 Southampton street, Northampton avenue to Wilbraham  
 avenue, . . . . .  
 Beverly street, Northampton to Wilbraham avenue, . . . . .

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent o'*

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BOARD OF ALDERMEN, December 26, 1900.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 26, 1900.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 27, 1900.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 27, 1900.

Approved,

WILLIAM P. HAYES, *Mayor.*



THIRTY-SECOND ANNUAL REPORT  
OF THE  
SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 26, 1900.

*To the Mayor and Board of Aldermen:—*

A statement of receipts and expenditures and of work completed by the Sewer Department during the year ending December 10, 1900, is herewith presented for your consideration.

Appropriations and receipts amounted to \$198,218.86, of which \$142,000 was especially provided by the issue of bonds for the construction of four trunk sewers.

Five thousand six hundred and ninety-four feet of pipe sewers have been relaid and ten thousand three hundred and thirteen feet have been newly constructed. One thousand four hundred and forty-four feet of brick sewers have been built under regular and fifteen thousand seven hundred and fifty-seven feet under special appropriation, and nine thousand and nineteen feet of pipe sewers have been built under regular and one thousand two hundred and ninety-four feet under special appropriation. Three of the four trunk sewers have been built by contract and for detailed statements concerning them as well as other information pertaining to sewers, you are respectfully referred to the report of the City Engineer, Charles M. Slocum, under whose plans, specifications, and inspection they have been constructed.

New pipe sewers have been built in eighteen streets. Relaying of old sewers on account of insufficient capacity has been done in ten streets.

Of the brick sewers, the one constructed in Nursery street has filled a long felt want and has enabled the abatement of a nuisance and a menace to health.

The Springfield street and Glenwood sewer was built by day labor in accordance with the expressed wish of the Sewer Committee, although proposals for construction of the brick portion were received together with those for the other three trunk sewers. It was hoped that the department would build the sewer at a cost not materially exceeding the contract price and at the same time protect its citizens in the distribution of labor and purchasing of materials. The labor employed and materials used have been the best, and it is with pleasure that a saving to the City of Springfield of \$2,574.84 is announced, representing the difference between its actual cost and the amount the low bidders would have received, had they been awarded the contract.

Your attention is respectfully called to the advisability of appropriating for the relaying of sewers, which may be found faulty on account of age or capacity, in the streets where permanent pavements are to be built, to enable such rebuilding least one year previous to the construction of pavement, and thereby obtain the best results.

Three of the trunk sewers built this year provide for drainage of many acres of valuable lands in their immediate vicinity and it is hoped that provisions will be made in the future for the construction of the necessary pipe. There should be an appreciable increment in taxable property which will fully repay the city for expense incurred.

In order to derive a large part of the final benefit the Mill River intercepting sewer, it will be necessary to extend it a distance of 5,000 to 6,000 feet, which will provide

drainage of a small part of the watershed northerly of the Watershops pond and east of Wilbraham avenue. At present, the drainage from the few houses representing a stunted development in that locality, is conducted through a filtration ditch, built at no expense to the City of Springfield in the year 1898, as a temporary expedient. It was the best provision which could be made at that time, but nevertheless unsatisfactory.

Orders of the City Council to date call for the construction of sewers in Logan street, Norfolk street from Wilbraham road to Marlboro street and Myrtle and Worcester streets, Indian Orchard, and relaying of sewers in Dartmouth terrace and Cornell street, and Main street between Sargeant and Bradford streets. It is earnestly recommended that provisions be made for executing these orders in 1901.

In closing it gives me pleasure to express thanks to Mr. Michael Roane, Assistant Superintendent of Streets and Sewers, for his valuable assistance, and to the Sewer Committee for the many courtesies received from its members during the year.

Respectfully yours,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*



BOARD OF ALDERMEN, Decem  
Read, accepted, ordered printed, and sent down  
E. A. :

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COMMON COUNCIL, Decem  
Read and concurred.  
H. S. C

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Presented to the Mayor for approval, Decembe  
E. A. NEWI

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MAYOR'S OFFICE, SPRINGFIELD, MASS., Decem  
Approved,  
WILLIAM P. :

## NEW SEWER CONSTRUCTION.—1900.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Adams st., well.....	.....	.....	.....	\$33 47
Allen st., manhole and flush gate.....	.....	.....	.....	64 58
Armory st., flush gate and well.....	.....	.....	.....	76 83
Bay st., east from Cambridge.....	Clay	247	8"	46 75
Bay st., Westminster to Sherman, relaying.....	Clay	812	15"	945 16
Belmont court.....	Clay	216	10"	146 76
Bowdoin st., manhole.....	.....	.....	.....	71 69
Bridge st., well.....	.....	.....	.....	12 87
Brookline ave., flush gate.....	.....	.....	.....	29 57
Buckingham place, relaying.....	Clay	235	10"	159 65
Butler st., easterly of Cass st.....	Clay	321	20"	520 71
Carew st., Garden brook to Prospect st.....	Brick	1,456 1,257 791	4'-3" cir. } 3'-0" cir. } 2'-8" cir. }	20,730 91
Catharine st., State to McKnight, re- laying.....	Clay	348 348 126	15" } 12" } 10" }	1,061 04
Cedar st., well.....	.....	.....	.....	10 35
Cedar st., Indian Orchard.....	Clay	274	12"	198 76
Chapel st.....	Clay	400	10"	208 13
Charles st., south from Liberty, re- laying.....	Clay	29	12"	12 94
Charles st., north from Liberty, re- laying.....	Clay	27	12"	12 10
Cherrellyn ave.....	Clay	300	15"	303 96
Chestnut st., Carew to Prospect, re- laying.....	Clay	424 537	24" } 20" }	1,618 64
Clayton ave.....	Clay	398 253	15" } 12" }	696 54
Clinton, Fulton, and Sargeant sts., balance of contract.....	.....	.....	.....	460 58
Clinton st., well.....	.....	.....	.....	10 41
Courtland st., flush gate.....	.....	.....	.....	39 59
Crosby st., flush gate.....	.....	.....	.....	17 60
Dale st., flush gate.....	.....	.....	.....	20 23
Dawson ave., flush gate.....	.....	.....	.....	18 10
Dickinson st.....	Brick	35 4'-6" cir. 60 5'-0"x2'-1" 251 5'-0" cir. 679 4' cir. 460 4'-10"x7'-3" ell 869 4'-8"x7'-0" ell 1,040 4'-4"x6'-6" ell 996 4'-2"x6'-3" ell		35,702 47
Dresden ave., flush gate.....	.....	.....	.....	25 14

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.
Eastern ave., extension to Chapel st.	Clay	101	10"
Everett st., manholes, wells, and flush gate.....	.....	.....	.....
Florida st., manholes.....	.....	.....	.....
Franklin st., east from Nursery st....	Clay	98	15"
Fulton st., wells.....	.....	.....	.....
Grove st., east from North Main.....	Clay	409	10"
Hawthorn place, flush gate.....	.....	.....	.....
Ingersoll Grove, manholes.....	.....	.....	.....
Jefferson ave., rear of south side.....	Cem.	518	12"
John st., flush gate.....	.....	.....	.....
King street ave., flush gate.....	.....	.....	.....
Main st., south from Sargeant, re laying.....	Clay	341	24"
		442	20"
		480	18"
		186	15"
Main st., wells.....	.....	.....	.....
Marble st., wells.....	.....	.....	.....
McKnight st., west from Catharine, relaying.....	Clay	30	15"
East from Catharine.....	Clay	26	10"
Melrose st., Marshall place and Cot- tage ave.....	Clay	263	15"
		74	12"
		772	10"
		592	8"
Mill River Valley intercepting sewer.	Brick	587	4'-0" cir.
		131	3'-6"x5'-3" ell
		1,743	5'-9" cir.
		779	4'-3" cir.
		1,611	3'-3" cir.
Monmouth st., flush gate.....	.....	.....	.....
North Main st., between Hooker and Grove, relaying.....	Clay	100	12"
Nursery st., Liberty to Franklin.....	Brick	694	2'-8" cir.
Orange st., extension easterly.....	Clay	249	10"
Orchard st., westerly from Plainfield	Clay	325	20"
		301	15"
		297	12"
		140	10"
Osgood st., well.....	.....	.....	.....
Parker st., Indian Orchard.....	Clay	32	24'
		221	12
Pendleton ave., well.....	.....	.....	.....
Phoenix ave.....	Clay	236	18
		250	15
		89	1
Pine st., Indian Orchard.....	Clay	1,411	'

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Rutledge ave., flush gate.....		....	....	\$21 15
Smith st., well.....		....	....	9 27
Spring st., Worthington to Summer, and Summer st. north from Spring.....				2,973 57
Springfield st. and Glenwood.....	Brick	677 598 389 1,292 40 16	3'-6" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10"x4'-3"	14,614 89
Springfield st. and Glenwood.....	Clay	1,294	24"	
State st., wells.....				
Summer st., north from old brook...	Brick	750	3'-8"x5'-6"	
Sumner ave., wells.....				
Union st., well.....				
Walnut st., Union to Oak, relaying..	Clay	558	24"	792 64
Westford ave., well.....				7 23
White st., flush gate.....				27 51
Wilbraham road, manhole and wells.				70 23
Winchester st., relaying.....	Clay	424	12"	857 96
Worcester st., I. O., east from Pine.	Clay	546	20"	768 42
		33,786		\$139,224 00
PIPE SEWERS BUILT BY PRIVATE PARTIES.				
Bellevue ave., easterly from Belmont ave.....	Clay	300 300 194	18" 15" 12"	
Bellevue ave., westerly from Dickin- son st.....	Clay	744	10"	
Crescent terrace, easterly from Fort Pleasant ave.....	Clay	298 322 105	15" 12" 10"	
Franklin st., westerly from Nursery st.....	Clay	207	15"	
*Franklin st., easterly from Nursery st.....	Cem.	566	15"	
La Verne ave., Bellevue to Marengo ave.....	Clay	211	10"	
Massasoit place, easterly from Mas- sasoit st.....	Clay	381	12"	
Nelson st., easterly from brick.....	Clay	308	24"	

\* Cement pipe laid previous to 1900 but not in tables.

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.
<b>PIPE SEWERS BUILT BY PRIVATE PARTIES.—Continued.</b>			
Oxford st., northerly from Crescent terrace.....	Clay	63	12"
Riverview st., northerly from Crescent terrace.....	Clay	63	10"
		4,062	
<b>BRICK SEWER BUILT BY PRIVATE PARTY.</b>			
Nelson st., northerly from Franklin st.....		587	2'-8" cir.
<b>SEWERS ABANDONED.</b>			
Bay st., Westminster to Sherman ..	Cem.	809	12"
Buckingham place, westerly from Bay st.....	"	145	8"
Carew st., Garden brook to Massasoit st.....	"	1,824	18"
Catharine st., State to Bowles.....	"	675	12"
Charles st., northerly from Liberty..	"	27	12"
Chestnut st., northerly from Grosvenor.....	"	129	10"
Chestnut st., southerly from Grovenor.....	"	116	12"
Chestnut st., Ringgold to Prospect..	"	399	12"
Grove st., westerly from North.....	Clay	197	10"
Main st., Sargeant to Franklin.....	Cem.	353	15"
		821	12"
McKnight st., at Catharine.....	"	30	15"
		26	10"
Mill st., at Locust.....	Brick	131	2'-6"x3'-9"
North Main st., at Grove, southerly.	Clay	100	12"
Walnut st., southerly from Union...	Cem.	558	12"
Winchester st., southerly from State.	"	407	12"
		6,747	

## NEW SEWER CONSTRUCTION.—CONTINUED.

SUMMARY.	Length in Feet.	Size.	Cost.
Brick sewers built by regular appropriation....	1,444		\$12,907 41
Brick sewers built by special appropriation....	15,757		102,753 00
Clay pipe sewers built by regular appropriation..	14,773		19,323 68
Clay pipe sewer built by special appropriation..	1,294		3,623 23
Cement pipe sewers, flush gates, manholes, and wells built by regular appropriation.....	518		616 68
	33,786		\$139,224 00
Clay pipe sewers built by private parties.....	4,062		
Brick sewer built by private party.....	587		
	38,435		
Sewers abandoned.....	6,747		8,032 70
Net addition carried to sewer table.....	31,688		\$131,191 30

## CLEANING AND REPAIRS.

Sewers for which less than \$10.00 was expended are included in "Sundry Sewers."

Bridge street,	\$254 87
Catch basins, cleaning,	167 49
Carew street,	14 13
Chestnut street, I. O.,	32 53
College street,	14 12
Garden Brook,	554 06
Liberty street,	494 50
Long Hill street,	21 26
Lowell street,	215 27
McKnight street,	14 51
Oak street, I. O.,	86 14
Park avenue,	31 05
Pynchon street,	10 75
Sherman street,	13 7
South street,	18
State street,	93
Sundry sewers, cleaning connections,	10
Sundry sewers, flushing,	1,2
Sundry sewers, repairs,	3
Union street,	
Wilbraham avenue,	
Worthington street,	
York street,	

## RECEIPTS.

## REGULAR APPROPRIATION.

From appropriation,	
From entrance fees,	
From other departments and private parties,	
From balance of appropriation, 1899,	
From contingent account, transferred,	
Balance unexpended,	

## EXPENDITURES.

## REGULAR APPROPRIATION.

Building and connecting private drains, . . . . .	\$2,523 68
City teams, . . . . .	744 32
Cleaning and repairs, . . . . .	3,914 26
Department and general expenses, . . . . .	2,452 73
Flushing sewers, . . . . .	1,202 57
Material, . . . . .	854 71
Services of City Engineer's assistants, . . . . .	1,156 89
Sewer construction, . . . . .	32,847 77
Supplies, . . . . .	204 24
Tools, . . . . .	489 38
Work and material for other departments, . . . . .	5,471 81
Work and material for private parties, . . . . .	680 09
	<hr/>
	\$52,542 45

## EXPENDITURES.

## SPECIAL APPROPRIATIONS.

	Limit of Expenditure.	Expenditure.	Balance Unexpended.
Carew street, . . . . .	\$21,300 00	\$20,730 91	\$569 09
Dickinson street, . . . . .	49,000 00	35,702 47	13,297 53
Mill River Valley, . . . . .	50,000 00	31,704 73	18,295 27
Springfield street and Glenwood, . . . . .	21,700 00	18,238 12	3,461 88



# CITY OF SPRINGFIELD.

SEWER CONSTRUCTION TO DECEMBER 10, 1900.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., west from Fisk ave.....	301 275	15" 12"	Clay } " }	<b>\$497.58</b>
Acushnet ave., east from Main st .....	294 279 271 26	20" 18" 15" 12"	" } " } " }	<b>298.94</b>
Adams st., Town brook to Main st .....	149 890	18"	Cem. Brick	<b>\$387.89</b> <b>66.68</b> <b>454.57</b>
Alden st., Hancock to East- ern ave .....	595 820	18" 15"	Cem. } " }	<b>1,529.54</b>
Eastern ave., to Wilbraham ave.....	895	15"	Clay	<b>911.39</b> <b>2,440.93</b>
Alexander st., east from North st.	288	10"	"	<b>188.48</b>
Alfred st., east from Birnie ave.	377	10"	"	.....
Allen st., Mill river to Randall ave.....	902 383 474 580	24" 18" 15" 12"	" } " } " }	<b>2,408.92</b> <b>1,598.59</b>
extension easterly.....	1,603	12"	"	<b>881.58</b> <b>4,889.09</b>
Allendale st., east from North st.	272 340	12" 10"	" } " }	<b>401.48</b>
Amherst st., north from Harvard Princeton to Monmouth....	466 512 191	12" 12" 10"	Cem. Clay } " }	<b>74.90</b> <b>622.90</b>
Andrew st., north from Boston road.....	463 422 382	20" 18" 12"	" } " }	<b>697.80</b> <b>1,758.67</b>
Arbor st., Butler to Carew....	398	12"	"	<b>318.06</b>
Armory Hill sewer from Ar- mory st., through private grounds to Worthington..	150 900 249	2'-5" x 3'-7 1/2" 2'-8" x 4'-0" 2'-1" x 3'-1 1/2"	Brick } " }	<b>5,318.04</b>
Armory st., north from Liberty	450 476	1'-10" x 2'-9" 1'-8" x 2'-6"	" } " }	<b>2,439.42</b>

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Armory st., north from brick sewer to Carew st. ....	156 267 290	24" 20" 12"	Clay " } "	\$975.77
north from culvert north of B. & A. R. R. ....	690 360 271	15" 12" 10"	" } " } "	
south from Summer ..... south from Worthington....	374 570	12" 15"	" } Cem.	
				384.78 658.06
				\$5,623.50
Ashley st. ....	65 580 697	18" 15" 12"	" } " } "	80.45 1,453.92
Auburn st. ....	397 335	12" 10"	Clay } "	1,534.37 655.06
Bancroft st., Garden brook to Chestnut st. ....	1361	3'-4" x 5'-0"	Brick } " } "	8,914.04
including Chestnut st., Ban- croft to Montmorenci....	379	3'-2" x 4'-9"	" }	
Montmorenci st., east from Chestnut .....	43	3'-2" x 4'-9"	" }	
Bay st., Bowles to Cambridge.	1,037 360	2'-8" x 4'-0" 2'-2" x 3'-3"	" } " }	8,056.62
east from Cambridge.....	247	8"	Clay	46.75
Sherman to Clarendon.....	151	8"	Cem.	46.89
Florida to Sherman.....	679	15"	"	768.15
	812	15"	Clay	945.16
Florida to Pleasant .....	234	12"	Cem.	334.00
St. James ave. to Pleasant..	250 245 228	15" 12" 10"	Clay } " } "	715.01
				10,912.51
Beacon st., Eastern ave. to Colton st. ....	250	10"	"	119.21
east from Colton.....	124	8"	"	3.65
				122.86
Beaumont st., north from Bel- mont ave. ....	250 431	12" 10"	" } " }	403.87
Beech st., north from Central.	410	10"	Cem.	74.20
Beechwood ave., Sumner to Spruce land ave. ....	595	12"	Clay	19.09
Belgrade pl., west from Walnut	220 140	8" 6"	" } "	.....
Bellevue ave., easterly from Belmont ave. ....	300 300 194	18" 15" 12"	" } " } "	.....
westerly from Dickinson st.	744	10"	"	.....

# REPORT ON SEWERS.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER	Length in Feet.	Size.	Material.	
Sumner ave., Mill river to brick sewer. . . . .	954	20"	Clay	\$4,15
from end of brick sewer in Kenwood Park. . . . .	432	20"	"	
	493	18"	"	
Sumner to Sumner ave. . . . .	301	15"	"	80
	403	12"	"	
	616	10"	"	
from Fort Pleasant ave. from top of hill to just east of Larchfield st. . . . .	90	10"	"	9
	660	2' 0" x 3' 4"	Brick	11,750
	445	1' 10" x 2' 9"	"	
	595	1' 8" x 2' 6"	"	
	550	1' 6" x 2' 3"	"	
Sumner court . . . . .	216	10"	Clay	}
Sumner st., south from State. . . . .	301	12"	"	
	300	10"	"	
	247	8"	"	
Sumner st., Princeton to Mon- mouth . . . . .	483	12"	"	9
Sumner st., I. O., Oak to Myrtle . . . . .	701	12"	Cem.	
east from Chestnut. . . . .	577	12"	Clay	
Sumner place, west from Main st. Sumner ave., north from Worces- ter st., sewer extension to Grace st. . . . .	290	10"	"	}
	162	15"	Cem.	
south from Worcester st., sewer extension to Walter st. . . . .	144	12"	"	
south from Wason ave. . . . .	362	24"	Clay	}
south from Wason ave. . . . .	350	18"	"	
	417	15"	"	
north from Arch st. . . . .	1,048	24"	"	}
north from Douglas st. . . . .	292	24"	"	
	303	20"	"	
	304	15"	"	
	144	10"	"	}
Sumner st., from Main to N. Y., N. H. & H. R. R. . . . .	1,284	12"	Cem.	
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) . . . . .	206	12"	"	}
Bond st., east from Garden brook sewer . . . . .	341	2' 0" x 3' 0"	Brick	
end of brick sewer to Chest- nut st. . . . .	959	24"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bowdoin st., south from Worthington .....	673	15"	Cem.	\$740.00
Worthington to Ingersoll grove.....	819	12"	"	758.64
				\$1,498.64
Bowles st., Bay to McKnight east and north from Catharine	752	15"	"	1,058.67
	250	12"	Clay	50.82
	275	8"	"	
				1,109.49
Boylston st.....	610	18"	Cem.	1,638.72
	346	15"	"	
Brace st., north from Belmont ave .....	137	10"	Clay	....
Bradford st .....	352	15"	Cem.	1,301.99
	758	12"	"	
	798	12"	"	
Bridge st., west of Main.....	275	15"	Clay	718.79
				429.14
Main to Chestnut.....	1,158	2' 0" x 3'-0"	Brick	5,414.20
				6,562.13
Broad st.....	970	15"	Cem.	1,240.75
Brookline ave., east from North st.....	328	12"	Clay	29.57
	171	10"	"	
	483	10"	Cem.	
Brown st., Yale to Bay.....	21	8"	"	357.65
Buckingham place, east from Buckingham st.....	235	10"	Clay	159.65
Buckingham st., Bay to Clarendon south from Bay.....	650	12"	Cem.	504.36
	35	12"	"	
State to Bay .....	305	18"	Clay	1,158.40
	345	15"	"	
	675	12"	"	
Burr st., east from Andrew....	570	12"	"	1,662.76
Butler st., Chestnut to Cass..	1,268	20"	"	417.83
easterly from Cass.....	321	20"	"	2,021.96
				520.71
				2,542.67
Calhoun st., North Main to North .....	853	12"	"	631.40
east from North.....	300	8"	"	227.19
				858.59
Cambridge st., south from Bay	276	20"	"	1,100.88
	331	18"	"	
	266	15"	"	
	302	12"	"	
	278	10"	"	396.35
				1,497.23
Card-factory pond .....	751	12"	Cem.	408.75
in front of new High school	492	24"	Clay	848.26
				1,257.01

## SEWER CONSTRUCTION.—CONT

NAME OF SEWER.	Length in Feet.	Size.	Material
Carew st .....	580	18"	Cem.
east from 18" pipe .....	200	12"	"
east from Garden Brook to Prospect st .....	1,456	4' 3" cir.	Brick
	1,257	3' 0" cir.	"
	791	2' 8" cir.	"
Cass st., south from Linden..	50	15"	Clay
Liberty to Franklin.....	500	12"	"
	152	10"	"
	11	8"	"
Catharine st., Dartmouth to McKnight.....	833	2' 0" x 3' 0"	Brick
State to McKnight .....	348	15"	Clay
	348	12"	"
	333	10"	"
Cedar st., Pine to Walnut...	180	3' 10" x 5' 9"	Brick
	1,074	3' 8" x 5' 6"	"
west from Pine.....	378	12"	Cem.
Cedar st., I. O., Main st. to river.....	433	2' 0" x 3' 0"	Brick
Main st. to Center st.....	274	12"	Clay
Central st., east from Main...	99	15"	Cem.
east from 15" pipe.....	546	12"	"
Main to Maple .....	527	2' 0" x 3' 0"	Brick
	700	1' 8" x 2' 6"	"
	225	18"	Cem.
Maple st. to top of Sterns Hill	480	1' 6"	Brick
	520	18"	Cem.
west from Pine st.....	500	12"	"
Pine to Mill river.....	645	18"	"
	866	15"	"
	339	12"	"
	335	12"	Clay
	310	10"	"
Central st. ave, Knox to Cen- tral st. ....	279	10"	Cem.
	285	12"	"
Center st., I. O., Oak to Pine..	463	12"	"
Chapel st.....	400	10"	Clay
Chapin st., north from State..	349	15"	"
	359	12"	"
Chase ave., east from Fort Pleasant ave.....	238	12"	"
	333	10"	"

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Charles st., north from Lib- erty .....	654	12"	Clay	\$576.40
south from Liberty .....	29	12"	"	12.94
				<b>\$589.34</b>
Charter ave .....	527	12"	"	475.20
Cherrellyn ave .....	300	15"	"	303.96
Chester st., Hancock to Cen- tral .....	330	8"	"	....
Chestnut st., south from Ed- wards .....	575	12"	Cem.	579.02
south from Mattoon .....	288	15"	"	819.69
Mattoon to Pearl .....	313	16' x 24"	Brick	445.40
Pearl to Bridge .....	143	1'-8" x 2'-6"	"	599.51
Bridge to Worthington .....	480	2'-0"	"	....
Worthington to Taylor .....	60	18"	Cem. }	291.17
	244	12"	" }	
Lyman st. to B. & A. R. R. ....	134	18"	" }	355.41
	72	12"	" }	
south from Franklin .....	500	12"	"	358.75
north from Franklin .....	397	12"	"	294.14
Essex to Everett .....	374	15"	"	586.72
Carew to Prospect .....	424	24"	Clay }	1,618.64
	537	20"	" }	
north from Prospect .....	313	18"	Cem.	406.00
Bancroft to Montmorenci .....	391	15"	"	535.24
south from Bancroft .....	299	12"	"	213.18
Ringgold to Prospect .....	220	12"	"	178.88
north from Montmorenci .....	185	12"	"	252.23
	717	12"	Clay	807.01
north from Eagle st .....	87	15"	"	....
south from Merwin st .....	178	10"	"	....
south from Eagle st .....	171	10"	"	....
				<b>7,840.99</b>
For brick sewer see Bancroft st.				
Chestnut st., I. O., Worcester to Hampden .....	428	15"	Cem.	425.81
Hampden to Berkshire .....	307	15"	Clay	342.65
				<b>768.46</b>
Cherryvale ave., east and west from Long Hill st .....	596	10"	"	....
Church st .....	556	18"	"	1,398.71
do .....	80	15"	Cem.	157.23
				<b>1,555.94</b>
Churchill st., Sumner ave. to Garfield st .....	580	12"	Clay	84.12
	55	8"	"	6.89
				<b>91.01</b>

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER	Length in Feet.	Size.	Material.	Cost.
Clarendon st., Worthington to St. James ave.....	336	18"	Cem.	\$1,678.74
St. James ave. to Sherman st.....	885	12"	"	
west from Worthington....	205	10"	Clay	
				225.80
Clayton ave.....	398	15"	"	\$1
	253	12"	"	
	274	18"	"	
Cleveland st., east from Armory	250	15"	"	
	276	12"	"	
	284	10"	"	
Clifford st., north from Bay..	250	12"	"	
	119	10"	"	
Clifton ave., south from Central st.....	300	8"	"	
	106	6"	"	
Cliftwood ave., south from Sumner ave.....	464	10"	"	441.59
Clinton st.....	410	12"	Cem.	
Clinton st., Conn. river to Ful- ton st.....	593	7'-3" x 4'-10"	Brick	26,048.84
including Fulton st. from Clinton to Sargeant.....	1,080	7'-0" x 4'-8"	"	
	42	7'-3" x 4'-10"	"	
Sargeant st.....	920	6'-9" x 4'-6"	"	
Carew st., west from Garden Brook.....	250	6'-9" x 4'-6"	"	
connection with Garden Brook.....	32	5' 0"	"	
submerged outlet.....		24"	Wood	2,131.45
		24"	C. Ir'n	
College ave., State st. to Shat- tuck ave.....	839	12"	Clay	139.62
north from Shattuck ave...	175	12"	"	....
College st., State st. to Wilbra- ham road.....	34	12"	"	
	443	10"	"	
Collins st., east from Eastern ave.....	300	12"	"	
	269	10"	"	
Colonial ave., south from State.....	326	12"	"	
	348	10"	"	
Colton st., Wilbraham road to Beacon st.....	448	18"	Clay	1
	569	15"	"	
	658	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Columbia terrace, north and east from Liberty st. ....	498	10"	Clay	....
Columbus ave., north from Park av. ....	307	10"	"	....
Congress st. ....	1,255	15"	Cem. }	\$1,733.14
	221	12"	" }	
	76	10"	" }	
Continental ave., south from Sumner ave. ....	215	12"	Clay }	27.45
	202	10"	" }	
Cook's ave., Worthington st. to N. Church ave. ....	117	15"	Cem. }	573.84
South from N. Church ave (includes cost of N. Church ave ) ....	69	10"	" }	
Cornell st., Harvard to Well- esley ....	374	12"	"	....
westerly from Princeton ...	52	10"	"	\$47.30
	167	8"	Clay	170.95
easterly from Princeton ...	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				468.50
Court st., east from Water....	273	12"	Cem.	226.15
west from City Hall....	431	12"	"	553.45
Main st. to City Hall....	200	12"	"	309.67
				1,089.27
Courtland st., north from State.	164	15"	Clay }	672.01
	621	12"	" }	
Crescent terrace, easterly from Fort Pleasant ave. ....	298	15"	" }	....
	322	12"	" }	
	105	10"	" }	
Crosby st., west from Walnut st. ....	321	10"	"	231.38
Cross st., east from Willow...	363	12"	Cem.	311.56
Main to Willow ....	388	18"	Clay	878.12
Crystal ave., east from Belmont ave. ....	251	15"	" }	1,189.68
	250	12"	" }	
	298	10"	" }	
Cypress st., from Conn. river to Garden brook in Ferry st. ....	1,466	3'-4" x 5'-0"	Brick	13,629.35
Cypress ave. ....	360	12"	Clay	484.08
Dale st., north from sewer, south from Hubbard ave. ....	203	10"	"	157.30
south from Winthrop. ....	46	8"	"	13.08
				170.38



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dartmouth st., St. James ave. to Yale st.....	973	3'-0" x 4'-6"	Brick }	\$8,247.4
Yale to Bowles.....	295	2'-6" x 3'-9"	" }	
Dartmouth terrace, Worthing- ton st. to Harvard.....	560	12"	Cem.	\$348.62
	478	12"	Clay	239.08
				587.5
Dawes st., south from Bay....	229	15"	" }	165.5
	380	12"	" }	
	518	10"	" }	
Dawson ave., west from White.	350	10"	"	95.3
Demond ave., west from Fisk ave.....	510	12"	" }	608.1
east from Plainfield st.....	403	12"	" }	
Dexter st., Knox to Pine....	558	12"	Cem.	60.83
	226	10"	Clay	245.10
				305.9
Dickinson st., Mill st. to Sum- ner ave.....	35	4' 6" cir.	Brick }	35,702.47
	60	5' 0", 2' 1"	" }	
	251	5' 0" cir.	" }	
	679	4' 0" cir.	" }	
	460	4'-10" x 7'-3"	" }	
	869	4'-8" x 7'-0"	" }	
	1,040	4'-4" x 6'-6"	" }	
	996	4'-2" x 6'-3"	" }	
Donald st., east from Birnie ave.....	315	10"	Clay	....
Dorchester st., St. James ave. to Amherst st.....	364	12"	" }	359.1
	238	10"	" }	
Douglas st. extension. North Main to Chestnut....	424	4'-6"	Brick }	4,805.5
	442	4'-0"	" }	
Douglas st. (see Rowland ave.)	....	....	....	....
Dresden ave., south from State st.....	359	12"	Clay }	25.5
	321	10"	" }	
Dwight st., north from Harrison ave.....	100	15"	Cem.	144.41
north from Worthington....	342	12"	"	374.73
south from Worthington....	269	12"	Clay }	2,520.71
south from Hillman.....	226	10"	" }	
north from Hillman.....	103	10"	" }	
north from Sanford.....	253	20"	" }	
	229	18"	" }	
	199	15"	" }	
south from Sanford.....	258	2'-8" x 4'-0"	Brick	1,571.86
				4,611.5
Dymon st.....	415	12"	Cem.	385.3

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eagle st., North Main to Chest- nut .....	643	15"	Clay	....
East Court st., west from Dwight .....	5	12"	Cem.	\$4.80
	202	12"	Clay	183.72
				\$188.52
Eastern ave., north from Mon- roe st. ....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
south from Monroe st. ....	28	12"	Cem.	45.09
	210	12"	Clay	147.90
north from Lebanon st. ....	194	12"	Cem.	331.17
Lebanon to Olive st. ....	159	12"	"	190.96
south from Olive st. ....	169	8"	Clay	119.57
Greene to Ladd. ....	38	15"	"	27.25
south from Greene. ....	125	8"	"	69.58
north from King st. ....	152	10"	Cem.	166.50
	101	10"	Clay	149.70
north from Pendleton ave. .	312	12"	Cem.	190.38
north from Tyler st. ....	286	12"	"	181.30
north from Quincy st. ....	118	10"	"	131.15
Watershop pond to Man- hattan st. ....	1,164	24"	Clay	2,089.43
Manhattan to Alden st. . .	338	20"	"	636.21
Alden to Collins st. ....	231	12"	"	313.99
				4,932.34
East William st. (see William st.) .....	....	12"	Cem.	
Edwards st. ....	551	12"	"	404.88
Elliott st., into and through Salem and 290 feet in Salem .....	283	18"	"	1,844.28
	709	15"	"	
	533	12"	"	
Elm st., Conn. river to Water st. ....	385	3'-9" x 3'-9"	Brick	29.70
Water st. to Main. ....	996	3'-8" x 5'-6"	"	10,714.49
submerged outlet. ....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
				12,804.78
Elmwood st., Main to Hanover.	300	18"	Clay	707.66
	249	15"	"	
	50	12"	"	
Emery st. ....	542	12"	Cem.	586.26
Essex st., west from Garden brook .....	418	15"	"	355.00
Garden brook to Chestnut. .	1,115	2'-2" x 3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
				7,815.43

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Essex st., I. O., west from Oak	254	12"	Clay	\$424
	145	10"	"	
Everett st., Chestnut to brook	323	15"	"	\$308.39
west from Cass.....	926	15"	"	821.43
east from Cass.....	....	....	....	104.35
				1,234
Euclid ave., Belmont ave. to Dickinson st.....	389	12"	"	1,102.00
	741	10"	"	
north from Dickinson st....	77	8"	"	50.67
				1,152
Fairfield st., west from Litch- field.....	380	12"	"	....
north and west from Garfield	556	10"	"	324.44
				324
Federal st., Worthington to Pearl.....	567	12"	Cem.	726.64
south from Summer.....	274	10"	Clay	172.00
				898
Ferry st., Main to Garden brook (see Cypress st).....	....	....	....	....
Garden brook to Chestnut st	1,168	2'-4" x 3'-6"	Brick	5,377.81
				5,377
Firglade ave., Sumner to Spruceland.....	350	10"	Clay	46.01
	270	8"	"	
Spruceland to Pineywoods ave.....	447	10"	"	....
		8"	"	46
Fisk ave., Rowland to Worces- ter.....	272	24"	"	1,073.11
	275	20"	"	
	298	10"	"	
	299	24"	"	
south from Wason.....	294	20"	"	1,216.81
	248	12"	"	2,289
Florence st., east from Pine...	824	15"	Cem.	2,068.95
	651	12"	"	
east from Hancock.....	283	10"	"	303.15
				2,372
Florentine Gardens, north from Pineywoods ave.....	421	10"	Clay	...
Florida st., Worthington to St. James ave.....	937	18"	Cem.	1,934.19
St. James ave. to Bay st....	601	15"	"	950.57
Worthington to Ingersoll grove.....	273	15"	"	359.06
	561	12"	"	523.88
				3,767

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Forest st., Belmont ave. to Park ave.....	419	12"	Clay }	\$651.93
	255	10"	" }	
Fort st., Main to Water .....	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave.....	888	2'-4" x 3'-6"	Brick }	\$13,293.38
	1,825	2'-0" x 3'-0"	" }	
south from Mill st.....	428	12"	Clay	293.42
				13,586.80
Franklin st., west from garden brook sewer.....	434	18"	Cem.	....
east from Garden brook sewer.....	469	18"	" }	1,834.76
	735	15"	" }	
Chestnut to Charles.....	273	15"	Clay	303.37
east from Charles.....	670	12"	"	471.99
west from Nursery.....	207	15"	"	
east from Nursery.....	98	15"	"	91.55
	566	15"	Cem.	....
				2,701.67
Fremont st., Main to Water..	780	....	Brick	702.45
west from Main .....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				1,424.25
Fulton st., Cypress to Clinton	882	12"	Cem.	826.66
north from Clinton.....	829	15"	"	1,138.56
north from John.....	314	12"	Clay }	639.82
	401	10"	" }	
				2,605.04
Gardner ave., north from Gard- ner st.....	151	8"	"	73.11
Gardner st .....	655	2'-0" x 3'-0"	Brick	1,995.23
	400	12"	Cem.	518.97
				2,514.20
Garden brook sewer, north from Liberty st. to C. R. R. R.....	2,936	5'-6", cir.	Brick }	47,577.34
	766	5'-0", cir.	" }	
	1,303	4'-6", cir.	" }	
	236	3'-0" x 4'-6"	" }	
Worthington st., easterly to Armory st.....	3,274	4 6-10', cir.	" }	29,761.32
	952	4'- 1", cir.	" }	
				77,338.66
Garfield st., east from Park ave.	556	15"	Clay }	967.16
	514	12"	" }	
west from Belmont ave....	531	10"	"	329.87
				1,297.03
George st., south from Dexter	409	10"	"	332.45

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Girard ave., Bay st. to Mc- Knight.....	947	12"	Clay	\$711.00
Grace st., east from Birnie ave	274	15"	Cem.	51.00
Grand ave., east from Reverest.	250	15"	Clay	
	252	12"	"	
west from Revere st.....	151	10"	"	
Grant st.....	588	12"	Cem.	499.00
Granville st., Eastern ave. to Logan st.....	495	12"	"	519.00
Gray's ave.....	495	12"	"	421.00
Greene st., Hancock to East ern ave.....	610	18"	"	
	793	15"	"	1,754.00
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	133.00
Greenwood st., Main to Garden brook.....	386	12"	Cem.	
east from Garden brook....	538	15"	Clay	
east from 15" pipe.....	113	12"	"	2,231.00
	452	12"	Cem.	
Grosvenor st.....	131	18"	Cem.	624.00
	648	15"	"	
Grove st., west from North....	679	10"	Clay	442.00
Grover st., east from Armory st.	300	18"	"	
	303	15"	"	
	298	12"	"	898.00
	432	10"	"	
Hall st., Belmont ave. to Dick- inson st.....	500	12"	"	
	474	10"	"	802.00
Hampden st.....	569	15"	Cem.	711.00
Hampden st., I. O.....	459	12"	"	301.00
Hampshire st., I. O.....				
east from Oak.....	250	12"	"	\$206.20
west from Oak.....	300	12"	Clay	633.59
	398	10"	"	839.00
Hancock ave., west from Han- cock st.....	520	10"	"	531.00
Hancock st. Central to Walnut	218	18"	Cem.	
	1,343	15"	"	1,759.06
north from Walnut.....	122	12"	"	88.00
Walnut (through Lebanon) to Quincy.....	1,852	3'-6" x 5'-3"	Brick	21,668.02
Quincy to State.....	913	3'-4" x 5'-0"	"	
Lebanon to Alden.....	827	2'-0" x 3'-0"	"	5,009.61
Mill river to Central st.....	920	12"	Clay	866.30
				29,390.00

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hanover st. ....	830	2'-2" x 3'-3"	Brick	\$2,650.26
Harriet st., east from North				
Main st. ....	250	15"	Clay	\$377.17
" .....	207	12"	"	
east from North st. ....	330	10"	"	
				550.09
Harrison ave., Main st. to				
Chestnut. ....	600	15"	Cem.	874.11
" .....	250	8"	Clay	203.61
				1,077.72
Harvard st., Yale to St. James				
ave. ....	907	12"	Cem.	831.70
St. James ave. to Cornell st..	736	12"	"	....
				831.70
Hawley st., Wilbraham road to				
Monroe st. ....	181	12"	"	40.40
" .....	330	10"	Clay	211.65
				252.05
Hawthorn place, south from				
Sumner ave. ....	460	10"	"	56.78
" .....	140	8"	"	
north from Pineywoods ave	281	10 "	"	
				56.78
Hawthorn st., west from Han-				
cock .....	441	12"	Cem.	445.87
Hayden st., north from State				
" .....	335	12"	Clay	....
" .....	299	10"	"	
" .....	222	8"	"	
Hebron st., north to Chestnut	663	12"	"	492.56
Hickory st., Mill river to Alden				
st., including 229' in Mill st.	548	24"	"	3,506.71
" .....	754	20"	"	
" .....	228	18"	"	
" .....	184	15"	"	
" .....	1,155	12"	"	
right of way for overflow				
sewer. ....	....	....	....	75.00
				3,581.71
High st. ....	810	15"	Cem.	1,331.39
" .....	844	12"	"	
east from Ingraham ave. ....	846	12"	Clay	
				2,276.71
Highland st., south from Allen				
" .....	625	18"	"	1,428.06
" .....	304	15"	"	
" .....	193	12"	"	
" .....	404	10"	"	
Hillman st., Main to Dwight..				
" .....	695	12"	Cem.	950.89
" .....	36	12"	Clay	26.28
				977.17

## SEWER CONSTRUCTION.—CONTI

NAME OF SEWER.	Length in Feet.	Size.	Material
Hillside place, east from Rich-			
elieu st. ....	106	8"	Clay
Holyoke st. ....	734	12"	Cem.
Homer st., south from State..	31	12"	Clay
	370	10"	"
Hooker st., east from North			
Main .....	444	10"	Cem.
Extension to North st. ....	255	10"	Clay
Howard st., west from Water	350	12"	Cem.
east from Water .....	312	12"	"
west from Main .....	344	15"	Clay
	321	12"	"
Hubbard ave., east from Main			
st .....	257	15"	"
	321	12"	"
Hunt terrace, north from			
Allen st. ....	279	12"	"
Ingersoll grove, north from			
Worthington st. ....	782	12"	Cem.
	218	8"	Clay
east from Bowdoin st .....	132	10"	"
James st .....	289	15"	Cem.
	534	12"	"
Jefferson ave., North Main st.			
to Chestnut .....	717	15"	"
	632	12"	"
	78	6"	Clay
rear of south side .....	518	12"	Cem.
John st. ....	652	12"	"
Keith st., Belmont ave. to			
Dickinson st. ....	551	12"	Clay
	551	10"	"
Kenwood Park, north from			
Belmont ave .....	130	12"	"
	1,127	10"	"
King st., Walnut to Hancock			
	504	15"	Cem.
	441	12"	"
Hancock to Eastern ave. ....	710	18"	"
	686	15"	"
Eastern ave. to Logan st. ....	405	12"	"
	72	10"	Clay
King st. ave., King st. to			
Lebanon .....	329	12"	Cem.
Knox st., Mill river to Wind-			
sor st. ....	1,115	15"	"
	198	12"	"

# REPORT ON SEWERS.

## SEWER CONSTRUCTION.—CONTINUED.

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Cost.	NAME OF SEWER.	Length in Feet.	Size.	Material.	
	Ladd st., Eastern ave. to Logan st .....	243 304	15" 12"	Clay " }	
	Lafayette st., St. James ave. to Amherst st .....	582 21	12" 10"	" " }	
\$39.04	Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay	\$2
364.47	Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	—
289.14	Lebanon st. (see Hancock) ...	158	3'-6" x 3'-3"	Brick	1.
799.34	west from Hancock .....	606	2'-0" x 3'-0"	"	1.
1,452.9	Hancock to Eastern ave ...	816	18" 15"	Cem. " }	1.
	Lenox st. ....	465	10"	Clay	—
	Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	
1,003.05	Leyfred ter., north from Bel- mont ave. ....	300 317	18" 15"	" " }	
106.53	Liberty st., west from Garden brook .....	70 290	... 12"	Brick Cem.	1.
1,108.5	Garden brook	967	15"	"	9.
924.2	Chestnut st. ....	784	2'-4" x 3'-6"	Brick	5.
1,604.87	Chestnut to Webster .....	659	1'-10" x 2'-9"	"	2.
37.89		684	2'-2" x 3'-3"	"	—
364.84	Webster to Armory ...	366	3'-0" x 4'-6"	"	—
2,007.9		1,282	2'-2" x 3'-3"	"	—
343.4		317	1'-10" x 2'-9"	"	—
1,014.2	north from Armory .....	449	2'-2" x 3'-3"	"	—
133.9		1,194	24"	Clay	—
921.37	Lillian st., east from Oak .....	297	18"	"	—
1,715.69	Lincoln st., west from Magazine st .....	823	12"	"	—
72.72	Linden st .....	470	18"	"	—
2,709.5	Litchfield st., north from Garfield Belmont ave. to Fairfield st.	862 69 159	15" 6" 15"	" " "	—
333.1	Locust st., York to Mill .....	84	3'-0" x 4'-6"	Brick	—
116.1		364	2'-9" x 4'-1 1/2"	"	—
		686	2'-6" x 3'-9"	"	—



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.
Logan st., north from Ladd..	88	10"	Clay
Lombard st .....	500	12"	Cem.
Long Hill st. and Washington ave., extension east from pipe .....	650 823	2'-4" x 3'-6" 2'-2" x 3'-3"	Brick } \$1
Long Hill st., west from Wash- ington ave .....	399	15"	Clay
	185	12"	"
	487	10"	"
south from Sumner ave.	356	8"	"
south from Warner pl .....	423	10"	"
east from Conn. river .....	1,310	24"	"
submerged outlet.....	26	18"	"
	290	18"	Wood
	28	18"	C. I.
Loring st .....	650	12"	Cem.
Lowell st .....	1,380	12"	"
Lyman st .....	1,335	2'-0" x 3'-0"	Brick
	720	15"	Cem.
Madison ave., north from Cen- tral st .....	310	10"	"
	100	8"	"
Magazine st.....	682	18"	"
	249	15"	"
Magnolia terrace, east side, Sumner ave. to Spruceland	586	8"	Clay
south from Spruceland....	90	8"	"
west side, Sumner ave. to Spruceland .....	622	8"	"
north from Washington ave.	362	24"	"
	602	12"	"
Main st., including cost of parts in Carew and Franklin..	523	12"	Cem.
south from Sargeant st. ....	341	24"	Clay
	442	20"	"
	480	18"	"
	186	15"	"
south from Locust .....	800	15"	"
York to B. & A. R. R.	56	7'-0", cir.	Brick
	1,772	6'-6", cir.	"
	906	5'-6", cir.	"
	990	5'-0", cir.	"
	1,624	3'-4" x 5'-0"	"
	864	2'-4" x 3'-6"	"
	263	12"	Clay

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Main st., I. O.....	2,321	2'-4" x 3'-6"	Brick	\$7,636.81
	500	18"	Cem. }	837.71
	185	15"	" }	128.49
	103	12"	Clay	5,024.19
Cedar to Lyons st.....	1,110	2'-0" x 3'-0"	Brick	
east from Lyons st.....	205	24"	Clay	1,334.58
	245	18"	" }	\$14,961.78
	129	12"	" }	
Malden st., south from Allen.	542	15"	" }	....
	291	12"	" }	
	494	10"	" }	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	" }	826.79
	645	12"	" }	
	205	10"	" }	
Maple st., Park to High.....	274	18"	Cem.	294.91
south from Union.....	515	18"	" }	959.13
	135	12"	" }	
north from Pine.....	195	15"	" }	1,421.68
	850	12"	" }	51.55
	....	....	" }	2,727.27
Mapledell st., north from State	337	15"	Clay	
	300	12"	" }	70.80
	346	10"	" }	
Maplewood terrace, east from Fort Pleasant ave.....	682	15"	" }	....
	329	12"	" }	
	178	10"	" }	
Marble st.....	222	18"	Cem.	
	586	15"	" }	1,178.97
	242	12"	" }	
Marengo ave., east from Bel- mont ave.....	443	15"	Clay	
	612	12"	" }	....
	778	10"	" }	
Margaret st., west from Water	520	12"	Cem.	507.30
east from Water.....	858	12"	" }	801.44
	....	....	....	1,308.74
Marion st., south from Bay...	833	12"	Clay	795.45
east from Chapin.....	94	10"	" }	25.89
	319	8"	" }	821.34
Market st.....	147	....	Brick	
	633	15"	Cem. }	1,066.36
	123	12"	" }	
	119	10"	Clay	....
	....	....	....	1,066.36

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.
Massasoit place, east from Massasoit st. ....	381	12"	Clay
Massasoit st., north from Carew .....	709	12"	Cem.
south from Lexington ave.	300	12"	Clay
	250	10"	"
south from Montmorenci...	233	10"	"
Mattoon st. ....	356	16"x24"	Brick
	87	15"	Cem.
Maynard ave., State st. to Shattuck ave. ....	431	15"	Clay
	400	12"	"
McKnight st., Catharine to Sherman .....	255	15"	Cem.
	30	15"	Clay
Catharine to Bowles .....	141	10"	Cem.
	26	10"	Clay
Bowles to Girard ave. ....	119	12"	Cem.
	263	10"	Clay
Mechanic st. ....	302	12"	Cem.
	20	8"	Clay
Melrose st., Marshall place and Cottage ave. ....	263	15"	"
	74	12"	"
	772	10"	"
	592	8"	"
Merrick ave., south from King st. ....	301	12"	Cem.
Merwin st., North Main to Chestnut .....	774	15"	Clay
Mill river intercepting sewer Mill river to Locust st. ....	370	5' 3"	Brick
	691	4' 0"	"
Mill river intercepting sewer Locust st. to Hickory .....	587	4' 0", cir.	Brick
	131	3' 6"x5' 3"	"
	1,748	5' 9", cir.	"
	779	4' 3", cir.	"
	1,611	3' 3", cir.	"
Mill st., Locust to Pine .....	943	2' 6"x3' 9"	
east from Main .....	236	8"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Monmouth st., west from Yale	64	12"	Clay	\$45.95
	278	10"	"	281.47
northwest from Berkeley...	350	12"	"	235.62
north and east from Dorchester st.	199	12"	"	218.15
	171	10"	"	121.75
				<hr/> \$902.94
Monroe st., Hancock to Eastern ave	611	18"	Cem. }	
	789	15"	" }	1,840.52
Eastern ave. to Colton st.	316	12"	" }	
Monson ave., north from Greene st.	200	8"	Clay	....
Montmorenci st., Chestnut to Massasoit	676	12"	"	700.32
Montrose st., State to Burr	338	15"	"	
	217	12"	" }	75.74
	329	10"	" }	
Morgan st., west from Garden brook	252	12"	Cem.	199.08
	568	18"	"	1,092.71
east from Garden brook	90	18"	Clay	233.10
				<hr/> 1,524.89
Morris st	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	317.82
				<hr/> 3,260.65
Mountain View st., north from Park ave	297	12"	Clay }	
	297	10"	" }	...
Mulberry st., east from Maple st	687	15"	" }	
	629	12"	" }	1,246.18
extension northerly	246	10"	"	233.59
west from Ridgewood terrace	144	15"	"	....
				<hr/> 1,479.77
Murray Hill ave			"	96.24
National ave	419	10"	"	23.83
Nelson ave., north from Greene st	90	12"	Cem.	27.96
	188	10"	"	126.54
				<hr/> 154.50
Nelson st., east from brick sewer	308	24"	Clay	....
New st	237	12"	Cem.	213.02
	33	8"	Clay	14.18
				<hr/> 227.20

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Newman st., west from Knox	175	12"	Cem.	
North st., Morgan to Ringgold	198	18"	"	\$356.84
Church to Grosvenor.....	68	18"	"	157.13
north from Carew.....	190	8"	"	84.88
north from Bancroft.....	153	12"	"	114.54
south from Bancroft.....	302	18"	Clay	411.55
north from Calhoun.....	256	8"	"	48.13
Osgood to Hebron.....	130	18"	"	426.85
	165	10"	"	
north from Jefferson ave...	233	8"	"	177.12
Waverly to Grove st.....	362	12"	"	302.86
south from Harriet.....	86	8"	"	....
Northampton ave., south from Wilbraham road.....	1,101	12"	"	
North Church ave., east from Cook's ave.....	209	10"	Cem.	713.66
west from Cook's ave. (for cost see Cook's ave.)...	133	10"	"	
North Main st., Arch to Osgood	730	15"	"	1,986.64
Arch to Hooker.....	538	18"	"	
	606	15"	"	359.6
	270	12"	Clay	
north from Wason ave....	348	12"	"	281
north from Morgan.....	173	8"	"	9
south from Morgan.....	102	8"	"	4
south from Wason ave....	215	2'-0" x 3'-0"	Brick	86
south from Douglas.....	500	1'-8" x 2'-6"	"	1,87
north from Douglas.....	326	2'-4" x 3'-6"	"	1,8
	272	1'-10" x 2'-9"	"	
north from Eagle.....	142	24"	Clay	
Harriet to Waverly.....	250	24"	"	
Norwood st., Main to Hanover	1,051	12"	Cem.	
Nursery st., Liberty to Franklin	694	2'-8", cir.	Brick	
north from Franklin.....	587	2'-8", cir.	"	
Oak st., north from Union (for cost see State).....	717	18"	Cem.	
Union to Tyler.....	220	18"	Clay	
	268	15"	"	
north from Walnut.....	158	18"	Cem.	
Oak st., I. O., north from Main	179	15"	"	
	171	12"	"	
south from Main st.....	590	2'-2" x 3'-3"	Br	
brick sewer to Hampshire st..	797	24"	C	
south from Hampshire.....	285	18"	"	
	300	15"	"	
	400	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oak Grove ave., north from State st.....	349	18"	Clay	....
	327	15"	"	
	158	12"	"	
Oakland st., Belmont ave. to Dickinson st.....	503	12"	"	\$719.10
	299	10"	"	
north from Dickinson.....	94	8"	"	
				21.29
				<b>\$740.39</b>
Olive st., Eastern ave. to Logan st.....	540	10"	"	400.76
Orange st., west from White st	381	12"	"	961.35
	649	10"	"	
east from White st.....	699	10"	"	
east from Highland st....	583	8"	"	1,015.67
Orchard st., west from Plain- field st.....	325	20"	"	
	301	15"	"	
	297	12"	"	
	140	10"	"	
Orleans court, west from Or- leans st.....	205	8"	"	....
Orleans st., north from Union	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	"	
north from Tyler.....	188	10"	Cem.	146.13
north from Pendleton ave	231	12"	"	327.73
				<b>966.28</b>
Osgood st., Garden brook to North st.....	92	18"	Clay	174.87
	588	18"	Cem.	1,544.57
west from Garden brook....	257	12"	"	
				<b>1,719.44</b>
Ozark st., south from Grand ave.	456	10"	Clay	....
Oxford st., north from Cres- cent terrace.....	63	12"	"	....
Palmer ave., east from Locust st.	14	12"	Cem.	....
	351	18"	Clay	1,165.79
	337	15"	"	
Park ave., north from Sumner	567	12"	"	123.15
south from Sumner.....	500	10"	"	....
east from Fort Pleasant ave.	1,081	24"	"	....
extension to Garfield st....	325	20"	"	1,217.48
	562	18"	"	
east and north from Haw thorn place.....	341	12"	"	....
	380	10"	"	
				<b>1,340.63</b>

# REPORT ON SEWERS.

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER	Length in Feet.	Size.	Material.	Cost
.....	1,140	18"	Cem.	
..... from Look pond to ..... & A. R. R. ....	1,227	12"	Clay	
..... from Cassiopee river	32	24"	"	\$261.81
.....	221	12"	"	
..... S. I. O., south from .....	372	10"	"	
..... east from Garden .....	1,238	15"	Cem.	46.18
..... from Garden brook....	214	10"	Clay	173.73
.....	190	...	Brick	96.16
..... to Spring.....	514	24"	Clay	1,792.62
.....	447	20"	"	
..... ave., Walnut st. to .....	247	18"	Cem.	1,603.16
.....	524	15"	"	
.....	429	12"	"	
..... st. to Eastern ave.	600	18"	"	1,395.98
.....	793	15"	"	
.....	236	18"	Clay	840.32
.....	250	15"	"	
.....	89	10"	"	
Pine st., Mill to Cedar.....	740	2'-6"x3'-9"	Brick	13,659.54
.....	1,529	3'-6"x5'-3"	"	
.....	500	3'-10"x5'-9"	"	
Pine st., Cedar to Walnut....	62	18"	Cem.	1,665.7
.....	884	15"	"	
.....	631	12"	"	
Pine st., I. O. ....	1,896	24"	"	
Pine st. court, east from Pine st.	348	10"	"	
Pineywoods ave., east from Magnolia terrace.....	343	20"	Clay	
.....	404	12"	"	
west from Magnolia terrace	350	10"	"	
northeast from Washington ave.....	334	15"	"	
.....	263	12"	"	
Plainfield st., Bradford to C. R. R. R. ....	1,431	12"	Cem.	
Wason ave. to Demond....	304	24"	Clay	
.....	249	20"	"	
.....	53	18"	"	
Rowland ave. to Talcott ...	274	24"	"	
.....	299	20"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Plainfield st., north from Tal-				
cott ave .....	216	10"	Clay	\$158.46
Washburn to Orchard ....	331	2'- 8"x4'-0"	Brick	1,480.15
south from Washburn .....	122	12"	Clay	129.78
				<u>\$5,270.52</u>
Pleasant st. ....	296	12"	Cem.	249.74
Plymouth st., Plainfield to Ful-				
ton .....	375	10"	Clay	196.59
Potter place, north from State				
st. ....	396	15"	Clay	....
	301	12"	"	
	274	10"	"	
Princeton st., Yale to Vas-				
sar .....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	"	195.52
Bay to Amherst. ....	103	18"	"	289.08
	689	18"	Clay	724.15
	151	15"	"	177.72
				<u>1,386.47</u>
Prospect st., east from Chest-				
nut .....	218	18"	"	623.53
	199	15"	"	
	196	12"	"	
Pyncheon st. ....	950	2'-0"x3'-0"	Brick	3,108.02
Queen st., Walnut to Hancock	634	12"	Cem.	594.68
Quincy st., Oak to Stebb-				
bins .....	860	12"	"	577.06
Hancock to Stebbins .....	522	12"	"	549.58
Hancock to Eastern ave. ....	637	18"	"	1,598.58
	765	15"	"	
Colton to Eastern ave. ....	208	10"	Clay	156.87
				<u>2,882.09</u>
Reed st., south from State ....	219	12"	"	28.74
	309	10"	"	
Revere st., south from White	750	20"	"	....
	250	10"	"	
	209	8"	"	
Richelieu place, east from				
Richelieu st. ....	100	8"	"	....
Richelieu st., north from Cooley				
lot .....	301	10"	"	....
Ridgewood place, north from				
Mulberry st. ....	400	12"	"	....
Ringgold st. ....	117	18"	Cem. }	681.73
	632	12"	"	
Ripley ave., south from St.				
James .....	230	10"	"	163.48
Riverview st., north from Cres-				
cent terrace. ....	63	10"	Clay	....



## SEWER CONSTRUCTION.—CONTINUED

NAME OF SEWER.	Length in Feet.	Size.	Material
Lowland ave., Conn. river to North Main st., including 630' in Douglas st. ....	579 51 1,247 1,330	5'-3", cir. 1'-8" x 2'-6" 6'-6", cir. 6'-0", cir.	Brick " " "
Lowland ave., Wilbraham road to State st. ....	199	8"	Clay
Lowledge ave., east from Main st. ....	574	24"	"
Lowland st. (see Elliott). ....			
Lowland st. ....	536	3'-2" x 4'-9"	Brick
Lowland st., Union to Mulberry north from Union. ....	549 262	15" 10"	Clay "
Lowland st. ....	830	12"	Cem.
Sewer in ave., south from Hampden st. ....	111	12"	"
Sewer east from Main st., south from Hubbard ave. ....	655	12"	"
Lowland st., Main to Garden brook. ....	360	15"	"
east from Garden brook ..	601	18"	"
east from 18" pipe. ....	463	12"	"
Lowland ave., Maynard to Willard. ....	200 143	10" 8"	Clay "
extension easterly. ....	50	8"	"
Lowland st., Bay to Clarendon Bay to McKnight. ....	175 443	12" 12"	Cem. "
south from McKnight. ....	822	12"	"
north from State. ....	316	12"	"
Lowland st., Knox to Dorne. ....	200	12"	"
Lowland ave., north from Sum- mer ave. ....	82	6"	Clay
Lowland st., south from Lyman .....	281 130	15" 12"	Cem. "
Worthington to State. ....	470 640 644	18" 15" 12"	" " "
extension to Worthington st (For brick sewer see Worth- ington st.)	132	12"	"
Worthington to Summer. ....	183	5'-0"	
including Summer st., north from Spring. ....	89 984	6'-0" x 4'-3" 4'-2" x 6'-3"	

(See Summer st.)

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Springfield st. and Glenwood.	677	3' 6", cir.	Brick	\$14,614.89
	598	3' 8", cir.	"	
	389	4' 3", cir.	"	
	1,292	3' 0", cir.	"	
	40	2' 0", cir.	"	
	16	2'-10" x 4'-3"	"	
	1,294	24"	Clay	3,623.23
				\$18,238.12
Spruce st. ....	600	12"	Cem.	558.03
Spruceland ave., Magnolia				
terrace to Beechwood ave.	309	8"	Clay	....
west from Beechwood.....	648	8"	"	....
extension to Long Hill st....	93	8"	"	153.52
				153.52
State st., west from Water....	152	12"	Cem.	....
	91	12"	"	71.19
west from Main (including				
cost of 275' in Water)....	907	18"	"	1,676.39
	636	18"	"	1,433.50
Main to Dwight.....	3,855	2'-cir.	Brick	5,770.83
	505	18"	Cem. }	
State st., west from Oak st....	130	12"	Clay	212.78
east from Oak (including				
cost of Oak north from				
Union) .....	2,110	18"	Cem.	3,470.51
Hancock to Sherman.....	1,147	3'- 4" x 5'-0"	Brick	13,555.85
Sherman to Chapin.....	492	3'- 0" x 4'-6"	"	
Chapin st. to Andrew.....	726	3'- 0" x 4'-6"	"	10,793.96
Andrew st. to Oak Grove				
ave.....	937	2'-10" x 4'-3"	"	5,042.79
east from Oak Grove				
ave .....	548	2'- 4" x 3'-6"	"	
	283	2'- 2" x 3'-3"	"	
	352	2'- 0" x 3'-0"	"	1,897.59
Courtland st. to almshouse				
	355	24"	Clay	43,925.39
	112	18"	"	
	1,547	12"	"	
Stearns ave., north from				205.83
Bridge st.....	172	12"	"	467.11
Stebbins st.....	506	12"	Cem.	
Stearns terrace, north from				
Central st. (including 105'				
in Central).....	350	12"	Clay	537.88
	148	12"	"	267.17
				805.05
St. James ave., north from Bay				
st .....	658	12"	Cem.	521.28
Florida st. to Ripley ave...	469	12"	"	500.89
north from Florida st.....	417	18"	"	1,073.90
	300	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hillside place, east from Rich- elieu st .....	106	8"	Clay	...
Holyoke st .....	734	12"	Cem.	\$924
Homer st., south from State..	31	12"	Clay	3
	370	10"	"	
Hooker st., east from North Main .....	444	10"	Cem.	\$39.04
Extension to North st. ....	255	10"	Clay	....
				31
Howard st., west from Water	350	12"	Cem.	364.47
east from Water .....	312	12"	"	289.14
west from Main .....	344	15"	Clay	799.34
	321	12"	"	
				1,451
Hubbard ave., east from Main st .....	257	15"	"	630
	321	12"	"	
Hunt terrace, north from Allen st .....	279	12"	"	...
Ingersoll grove, north from Worthington st. ....	782	12"	Cem.	1,003.05
	218	8"	Clay	
east from Bowdoin st .....	132	10"	"	106.53
				1,109
James st .....	289	15"	Cem.	924
	534	12"	"	
Jefferson ave., North Main st. to Chestnut .....	717	15"	"	1,604.87
	632	12"	"	
	78	6"	Clay	
rear of south side .....	518	12"	Cem.	364.84
				2,007
John st .....	652	12"	"	382
Keith st., Belmont ave. to Dickinson st. ....	551	12"	Clay	1,018
	551	10"	"	
Kenwood Park, north from Belmont ave .....	130	12"	"	130
	1,127	10"	"	
King st., Walnut to Hancock	504	15"	Cem.	921.37
	441	12"	"	
Hancock to Eastern ave. ....	710	18"	"	1,715.69
	686	15"	"	
Eastern ave. to Logan st. ....	405	12"	"	
	72	10"	Clay	72.72
King st. ave., King st. to Lebanon .....	329	12"	Cem.	2,709
Knox st., Mill river to Wind- sor st .....	1,115	15"	"	332
	198	12"	"	116

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Ladd st., Eastern ave. to Logan st .....	243 304	15" 12"	Clay " }	\$424.92
Lafayette st., St. James ave. to Amherst st .....	582 21	12" 10"	" " }	514.86
Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay	\$2,088.10 282.48
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	2,370.58
Lebanon st. (see Hancock) .....	158	3'-6" x 5'-3"	Brick	.....
west from Hancock .....	606	2'-0" x 3'-0"	"	1,495.77
Hancock to Eastern ave .....	816	18" 15"	Cem. " }	1,701.28
Lenox st. ....	465	10"	Clay	8,197.05 32.91
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	516.31
Leyfred ter., north from Bel- mont ave. ....	300 317	18" 15"	" " }	957.30
Liberty st., west from Garden brook .....	70 290	... 12"	Brick Cem.	1,124.84
Garden brook Chestnut st. ....	967	15"	"	
Chestnut to Webster .....	784 659	2'-4" x 3'-6" 1'-10" x 2'-9"	Brick " }	9,123.49
Webster to Armory .....	684 366	2'-2" x 3'-3" 3'-0" x 4'-6"	" " }	5,383.15
north from Armory .....	1,282 317 449	2'-2" x 3'-3" 1'-10" x 2'-9" 2'-2" x 3'-3"	" " }	2,539.81
Lillian st., east from Oak .....	297	12"	"	20,674.20 232.47
Lincoln st., west from Magazine st .....	823	12"	"	676.54
Linden st .....	470 862	18" 15"	" " }	1,254.55
Litchfield st., north from Garfield Belmont ave. to Fairfield st.	69 159	6" 15"	" " }	7.10 335.11
Locust st., York to Mill .....	84 364 686	3'-0" x 4'-6" 2'-9" x 4'-1 1/2" 2'-6" x 3'-9"	Brick " }	342.21 6,804.18

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Logan st., north from Ladd..	88	10"	Clay	\$67.4
Lombard st.....	500	12"	Cem.	329.3
Long Hill st. and Washington ave., extension east from pipe .....	650 823	2'-4" x 3'-6" 2'-2" x 3'-3"	Brick " }	\$6,921.52
Long Hill st., west from Wash- ington ave.....	399 185 487	15" 12" 10"	Clay " }	953.28
south from Sumner ave.	356	8"	"	324.90
south from Warner pl....	423	10"	"	379.51
east from Conn. river....	1,310	24"	"	2,086.09
submerged outlet.....	26 290 28	18" 18" 18"	" Wood C. I. }	5,387.70
Loring st.....	650	12"	Cem.	16,053.4
Lowell st.....	1,380	12"	"	750.4
Lyman st.....	1,335 720	2'-0" x 3'-0" 15"	Brick Cem.	262.4 6,113.12 1,655.26
				7,768.3
Madison ave., north from Cen- tral st.....	310 100	10" 8"	" }	64.3
Magazine st.....	682 249	18" 15"	" }	1,103.3
Magnolia terrace, east side, Sumner ave. to Spruceland	586	8"	Clay	
south from Spruceland....	90	8"	"	81.4
west side, Sumner ave. to Spruceland .....	622	8"	"	
north from Washington ave.	362 602	24" 12"	" }	....
Main st., including cost of parts in Carew and Franklin..	523	12"	Cem.	944.47
south from Sargeant st....	341 442 480 186	24" 20" 18" 15"	Clay " }	2,539.81
south from Locust.....	800	15"	"	1,291.43
York to B. & A. R. R.	56 1,772 906 990 1,624 864 263	7'-0", cir. 6'-6", cir. 5'-6", cir. 5'-0", cir. 3'-4" x 5'-0" 2'-4" x 3'-6" 12"	Brick " } " } " } " } " } Clay	20,812.99 34,453.56 164.82
				60,207.4

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Main st., I. O.....	2,321	2'-4" x 3'-6"	Brick	\$7,636.81
	500	18"	Cem. }	
	185	15"	" }	837.71
	103	12"	Clay	128.49
Cedar to Lyons st.....	1,110	2'-0" x 3'-0"	Brick	5,024.19
east from Lyons st.....	205	24"	Clay }	
	245	18"	" }	1,334.58
	129	12"	" }	\$14,961.78
Malden st., south from Allen..	542	15"	" }	
	291	12"	" }	....
	494	10"	" }	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	" }	
	645	12"	" }	826.79
	205	10"	" }	
Maple st., Park to High.....	274	18"	Cem.	294.91
south from Union.....	515	18"	" }	959.13
	135	12"	" }	
north from Pine.....	195	15"	" }	1,421.68
	850	12"	" }	51.55
	....	....	" }	2,727.27
Mapledell st., north from State	337	15"	Clay }	
	300	12"	" }	70.80
	346	10"	" }	
Maplewood terrace, east from Fort Pleasant ave.....	682	15"	" }	
	329	12"	" }	....
	178	10"	" }	
Marble st.....	222	18"	Cem. }	
	586	15"	" }	1,178.97
	242	12"	" }	
Marengo ave., east from Bel- mont ave.....	443	15"	Clay }	
	612	12"	" }	....
	778	10"	" }	
Margaret st., west from Water	520	12"	Cem.	507.30
east from Water.....	858	12"	" }	801.44
	....	....	....	1,308.74
Marion st., south from Bay...	833	12"	Clay	795.45
east from Chapin.....	94	10"	" }	
	319	8"	" }	25.89
	....	....	....	821.34
Market st.....	147	....	Brick }	
	633	15"	Cem. }	1,066.36
	123	12"	" }	
	119	10"	Clay }	....
	....	....	....	1,066.36

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Massasoit place, east from Massasoit st. ....	381	12"	Clay	.....
Massasoit st., north from Carew .....	709	12"	Cem.	\$547.51
south from Lexington ave.	300	12"	Clay	228.19
250	10"	"		
south from Montmorenci...	233	10"	"	168.93
				<hr/> \$944.4
Mattoon st. ....	356	16"x24"	Brick	
87	15"	Cem.		688.4
Maynard ave., State st. to Shattuck ave. ....	431	15"	Clay	
400	12"	"		607.3
McKnight st., Catharine to Sherman. ....	255	15"	Cem.	421.42
30	15"	Clay		56.78
Catharine to Bowles. ....	141	10"	Cem.	67.27
26	10"	Clay		75.32
Bowles to Girard ave. ....	119	12"	Cem.	81.85
263	10"	Clay		233.51
				<hr/> 936.1
Mechanic st. ....	302	12"	Cem.	205.25
20	8"	Clay		26.48
				<hr/> 231.7
Melrose st., Marshall place and Cottage ave. ....	263	15"	"	
74	12"	"		
772	10"	"		
592	8"	"		1,345.6
Merrick ave., south from King st. ....	301	12"	Cem.	.....
Merwin st., North Main to Chestnut .....	774	15"	Clay	.....
Mill river intercepting sewer Mill river to Locust st. ....	370	5' 3"	Brick	
691	4' 0"	"		5,770.86
Mill river intercepting sewer Locust st. to Hickory. ....	587	4' 0", cir.	Brick	.....
131	3' 6"x5' 3"	"		
1,743	5' 9", cir.	"		31,704.73
779	4' 3", cir.	"		
1,611	3' 3", cir.	"		
				<hr/> 37,475.4
Mill st., Locust to Pine ....	943	2' 6"x3' 9"	"	4,764.79
east from Main. ....	236	8"	Cem.	75.45
				<hr/> 4,840.2



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Monmouth st., west from Yale	64	12"	Clay	\$45.95
	278	10"	"	281.47
northwest from Berkeley...	350	12"	"	235.62
north and east from Dor-				
chester st. ....	199	12"	"	218.15
	171	10"	"	121.75
				<hr/> \$902.94
Monroe st., Hancock to East-				
ern ave. ....	611	18"	Cem. }	
	789	15"	" }	1,840.52
Eastern ave. to Colton st..	316	12"	" }	
Monson ave., north from				
Greene st. ....	200	8"	Clay	....
Montmorenci st., Chestnut to				
Massasoit. ....	676	12"	"	700.32
Montrose st., State to Burr...	338	15"	"	
	217	12"	"	75.74
	329	10"	"	
Morgan st., west from Garden				
brook. ....	252	12"	Cem.	199.08
east from Garden brook...	568	18"	"	1,092.71
	90	18"	Clay	233.10
				<hr/> 1,524.89
Morris st. ....	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	317.82
				<hr/> 3,260.65
Mountain View st., north from				
Park ave. ....	297	12"	Clay }	
	297	10"	" }	...
Mulberry st., east from Maple				
st. ....	687	15"	" }	1,246.18
	629	12"	" }	
extension northerly. ....	246	10"	"	233.59
west from Ridgewood ter-				
race. ....	144	15"	"	....
				<hr/> 1,479.77
Murray Hill ave. ....			"	96.24
National ave. ....	419	10"	"	23.83
Nelson ave., north from Greene				
st. ....	90	12"	Cem.	27.96
	188	10"	"	126.54
				<hr/> 154.50
Nelson st., east from brick				
sewer. ....	308	24"	Clay	....
New st. ....	237	12"	Cem.	213.02
	33	8"	Clay	14.18
				<hr/> 227.20



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Newman st., west from Knox	175	12"	Cem.	\$11.49
North st., Morgan to Ringgold	198	18"	"	\$356.84
Church to Grosvenor.....	68	18"	"	157.13
north from Carew.....	190	8"	"	84.88
north from Bancroft.....	153	12"	"	114.54
south from Bancroft.....	302	18"	Clay	411.55
north from Calhoun.....	256	8"	"	48.13
Osgood to Hebron.....	130	18"	"	426.85
	165	10"	"	
north from Jefferson ave...	233	8"	"	177.12
Waverly to Grove st.....	362	12"	"	302.86
south from Harriet.....	86	8"	"	....
				2,079.90
Northampton ave., south from Wilbraham road.....	1,101	12"	"	830.79
North Church ave., east from Cook's ave.....	209	10"	Cem.	713.66
west from Cook's ave. (for cost see Cook's ave.)...	133	10"	"	
North Main st., Arch to Osgood	730	15"	"	1,986.64
Arch to Hooker.....	538	18"	"	
	606	15"	"	359.65
	270	12"	Clay	
north from Wason ave....	348	12"	"	281.41
north from Morgan.....	173	8"	"	90.69
south from Morgan.....	102	8"	"	41.98
south from Wason ave....	215	2'-0" x 3'-0"	Brick	860.00
south from Douglas.....	500	1'-8" x 2'-6"	"	1,874.35
north from Douglas.....	326	2'-4" x 3'-6"	"	1,840.24
	272	1'-10" x 2'-9"	"	
north from Eagle.....	142	24"	Clay	449.66
Harriet to Waverly.....	250	24"	"	470.75
				8,969.03
Norwood st., Main to Hanover	1,051	12"	Cem.	1,069.55
Nursery st., Liberty to Franklin	694	2' 8", cir.	Brick	2,284.52
north from Franklin.....	587	2' 8", cir.	"	...
				2,284.52
Oak st., north from Union (for cost see State).....	717	18"	Cem.	....
Union to Tyler.....	220	18"	Clay	752.00
	268	15"	"	
north from Walnut.....	158	18"	Cem.	280.65
				1,032.65
Oak st., I. O., north from Main	179	15"	"	637.00
	171	12"	"	
south from Main st.....	590	2'-2" x 3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
south from Hampshire.....	285	18"	"	1,509.70
	300	15"	"	
	400	12"	"	6,145.33

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oak Grove ave., north from State st.....	349	18"	Clay	....
	327	15"	"	
	158	12"	"	
Oakland st., Belmont ave. to Dickinson st.....	503	12"	"	\$719.10
	299	10"	"	
north from Dickinson.....	94	8"	"	
				21.29
				<u>\$740.39</u>
Olive st., Eastern ave. to Logan st.....	540	10"	"	400.76
Orange st., west from White st	381	12"	"	961.35
	649	10"	"	
east from White st.....	699	10"	"	
east from Highland st....	583	8"	"	1,015.67
Orchard st., west from Plain- field st.....	325	20"	"	
	301	15"	"	
	297	12"	"	
	140	10"	"	
Orleans court, west from Or- leans st.....	205	8"	"	....
Orleans st., north from Union	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	"	
north from Tyler.....	188	10"	Cem.	146.13
north from Pendleton ave	231	12"	"	327.73
				<u>966.28</u>
Osgood st., Garden brook to North st.....	92	18"	Clay	174.87
	588	18"	Cem.	1,544.57
west from Garden brook....	257	12"	"	
				<u>1,719.44</u>
Ozark st., south from Grand ave.	456	10"	Clay	....
Oxford st., north from Cres- cent terrace.....	63	12"	"	....
Palmer ave., east from Locust st.	14	12"	Cem.	....
	351	18"	Clay	1,165.79
	337	15"	"	
				<u>1,165.79</u>
Park ave., north from Sumner	567	12"	"	123.15
south from Sumner.....	500	10"	"	....
east from Fort Pleasant ave	1,081	24"	"	....
extension to Garfield st....	325	20"	"	1,217.48
	562	18"	"	
east and north from Haw thorn place.....	341	12"	"	....
	380	10"	"	
				<u>1,340.63</u>

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Park st. ....	1,140	18"	Cem.	\$1,393.35
Parker st., from Loon pond to B. & A. R. R. ....	1,227	12"	Clay	1,266.36
south from Chicopee river.	32	24"	"	\$261.81
	221	12"	"	
Pasco st., I. O., south from Essex. ....	372	10"	"	1,528.17
Patton st., east from Garden brook. ....	1,238	15"	Cem.	46.18
west from Garden brook. ....	214	10"	Clay	173.73
				219.91
Pearl st. ....	190	...	Brick	96.16
Chestnut to Spring. ....	514	24"	Clay	1,792.62
	447	20"	"	
				1,888.78
Pendleton ave., Walnut st. to Hancock. ....	287	18"	Cem.	1,603.16
	524	15"	"	
	429	12"	"	
Hancock st. to Eastern ave.	600	18"	"	1,395.98
	793	15"	"	
				2,999.14
Phoenix ave. ....	236	18"	Clay	840.32
	250	15"	"	
	89	10"	"	
Pine st., Mill to Cedar. ....	740	2'-6" x 3'-9"	Brick	13,659.54
	1,529	3'-6" x 5'-3"	"	
	500	3'-10" x 5'-9"	"	
Pine st., Cedar to Walnut. ....	62	18"	Cem.	1,665.54
	884	15"	"	
	631	12"	"	
Pine st., I. O. ....	1,896	24"	"	15,325.08
Pine st. court, east from Pine st.	348	10"	"	4,170.03
Pineywoods ave., east from Magnolia terrace. ....	343	20"	Clay	....
	404	12"	"	
west from Magnolia terrace northeast from Washington ave. ....	350	10"	"	....
	334	15"	"	
	263	12"	"	....
Plainfield st., Bradford to C. R. R. ....	1,431	12"	Cem.	1,039.59
Wason ave. to Demond. ....	304	24"	Clay	1,253.59
	249	20"	"	
	53	18"	"	
Rowland ave. to Talcott ...	274	24"	"	1,208.95
	299	20"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Plainfield st., north from Tal-				
cott ave .....	216	10"	Clay	\$158.46
Washburn to Orchard .....	331	2' 8" x 4'-0"	Brick	1,480.15
south from Washburn .....	122	12"	Clay	129.78
				\$5,270.52
Pleasant st. ....	296	12"	Cem.	249.74
Plymouth st., Plainfield to Ful-				
ton .....	375	10"	Clay	196.59
Potter place, north from State				
st. ....	396	15"	Clay	....
	301	12"	"	
	274	10"	"	
Princeton st., Yale to Vas-				
sar .....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	"	195.52
Bay to Amherst. ....	103	18"	"	289.08
	689	18"	Clay	724.15
	151	15"	"	177.72
				1,386.47
Prospect st., east from Chest-				
nut. ....	218	18"	"	623.53
	199	15"	"	
	196	12"	"	
Pynchon st. ....	950	2'-0" x 3'-0"	Brick	3,108.02
Queen st., Walnut to Hancock	634	12"	Cem.	594.68
Quincy st., Oak to Steb-				
bins .....	860	12"	"	577.06
Hancock to Stebbins .....	522	12"	"	549.58
Hancock to Eastern ave. ....	637	18"	"	1,598.58
	765	15"	"	
Colton to Eastern ave. ....	208	10"	Clay	156.87
				2,882.09
Reed st., south from State. ....	219	12"	"	28.74
	309	10"	"	
Revere st., south from White				
	750	20"	"	....
	250	10"	"	
	209	8"	"	....
Richelieu place, east from				
Richelieu st. ....	100	8"	"	....
Richelieu st., north from Cooley				
lot .....	301	10"	"	....
Ridgewood place, north from				
Mulberry st. ....	400	12"	"	....
Ringgold st. ....	117	18"	Cem.	681.73
	632	12"	"	
Ripley ave., south from St.				
James .....	230	10"	"	163.48
Riverview st., north from Cres-				
cent terrace. ....	63	10"	Clay	....

## SEWER CONSTRUCTION.—CONTIN

NAME OF SEWER.	Length in Feet.	Size.	Material
Rowland ave., Conn. river to North Main st., including 630' in Douglas st.....	579 51 1,247 1,330	5'-3", cir. 1'-8" x 2'-6" 6'-6", cir. 6'-0", cir.	Brick " " "
Rutland ave., Wilbraham road to State st.....	199	8"	Clay
Rutledge ave., east from Main st.....	574	24"	"
Salem st. (see Elliott).....			
Sanford st.....	536	3'-2" x 4'-9"	Brick
School st., Union to Mulberry north from Union.....	549 262	15" 10"	Clay "
Seventh st.....	830	12"	Cem.
Sewer in ave., south from Hampden st.....	111	12"	"
Sewer east from Main st., south from Hubbard ave.....	655	12"	"
Sharon st., Main to Garden brook.....	360	15"	"
east from Garden brook ..	601	18"	"
east from 18" pipe.....	463	12"	"
Shattuck ave., Maynard to Willard.....	200 143	10" 8"	Clay "
extension easterly.....	50	8"	"
Sherman st., Bay to Clarendon Bay to McKnight.....	175 443	12" 12"	Cem. "
south from McKnight.....	822	12"	"
north from State.....	316	12"	"
Smith st., Knox to Dorne....	200	12"	"
Sorrento ave., north from Sum- ner ave.....	82	6"	Clay
Spring st., south from Lyman	281 130	15" 12"	Cem "
Worthington to State.....	470 640 644	18" 15" 12"	" " "
extension to Worthington st (For brick sewer see Worth- ington st.)	132	12"	Clay
Worthington to Summer... including Summer st., north , from Spring.....	183 89 984	5'-0" 6' 0" x 4'-3" 4' 2" x 6'-3"	P " "

(See Summer st.)

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Springfield st. and Glenwood.	677	3' 6", cir.	Brick	\$14,614.89
	598	3' 3", cir.	"	
	389	4' 3", cir.	"	
	1,292	3' 0", cir.	"	
	40	2' 0", cir.	"	
	16	2'-10" x 4'-3"	"	3,623.23
	1,294	24"	Clay	
				\$18,238.12
Spruce st. . . . .	600	12"	Cem.	558.08
Spruceland ave., Magnolia terrace to Beechwood ave.	309	8"	Clay	....
west from Beechwood.....	648	8"	"	....
extension to Long Hill st. . .	93	8"	"	153.52
				153.52
State st., west from Water....	152	12"	Cem.	....
	91	12"	"	71.19
west from Main (including cost of 275' in Water)....	907	18"	"	1,676.39
	636	18"	"	1,438.50
Main to Dwight.....	3,855	2'-cir.	Brick	5,770.83
	505	18"	Cem.	
State st., west from Oak st. ....	130	12"	Clay	212.78
east from Oak (including cost of Oak north from Union) . . . . .	2,110	18"	Cem.	3,470.51
Hancock to Sherman.....	1,147	3'- 4" x 5'-0"	Brick	13,555.85
Sherman to Chapin.....	492	3'- 0" x 4'-6"	"	
Chapin st. to Andrew....	726	3'- 0" x 4'-6"	"	10,793.96
Andrew st. to Oak Grove ave. ....	937	2'-10" x 4'-3"	"	
east from Oak Grove ave . . . . .	548	2'- 4" x 3'-6"	"	5,042.79
	283	2'- 2" x 3'-3"	"	
	352	2'- 0" x 3'-0"	"	
Courtland st. to almshouse	355	24"	Clay	1,897.59
	112	18"	"	
	1,547	12"	"	
Stearns ave., north from Bridge st. ....	172	12"	"	43,925.39
Stebbins st. ....	506	12"	Cem.	205.83
Sterns terrace, north from Central st. (including 105' in Central).....	350	12"	Clay	537.88
	148	12"	"	267.17
St. James ave., north from Bay st . . . . .	658	12"	Cem.	805.05
Florida st. to Ripley ave....	469	12"	"	500.89
north from Florida st. ....	417	18"	"	1,073.90
	300	12"	"	

## SEWER CONSTRUCTION.—CONTINUED

NAME OF SEWER.	Length in Feet.	Size.	Material.
St. James ave., Clarendon st. to Westminster.....	248	15"	Cem.
Dartmouth st. to Harvard ..	385	2'-3"x3'-0"	Brick
Harvard to Princeton....	528	24"	Clay
north from Princeton.....	308	18"	"
	249	15"	"
	57	12"	"
Clarendon to Dartmouth ...	138	8"	Clay
Stockbridge st.....	777	18"	Cem.
Sullivan st., east from Armory	395	12"	Clay
Summer st., north from old brook .....	1,025	3'-8"x5'-6"	Brick
	1,091	2'-10"x4'-3"	"
(See Spring st.)			
Summer ave., Fort Pleasant ave. to Randolph st....	673	2'-0"x3'-0"	"
Randolph st. to Jackson ...	360	1'-10"x2'-9"	"
Jackson st. to Hamilton....	360	1'-8"x2'-6"	"
Hamilton st. to Greenleaf...	367	1'-6"x2'-3"	"
Greenleaf st. to Belmont ave.....	353	20"	Clay
	851	18"	"
	736	15"	"
	272	12"	"
	426	10"	"
east from Belmont ave.....	709	8"	"
Fort Pleasant ave. to Long Hill st.....	448	12"	"
	358	10"	"
Symonds ave., Worthington st. to Bridge (includes cost of Bond place).....	300	15"	Cer
Talcott ave., Fisk ave. to Plainfield st .....	362	15"	Cla
	316	12"	"
Taylor ave.....	212	12"	C
Taylor st., Main to Chestnut	650	15"	
	341	12"	
	248	12"	
Temple st., outlet into High School sewer.....	169	15"	
Tenth st., east from Garden brook .....	300	18"	
	302	15"	
	421	12"	
	4	8"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Terrence st. ....	48	10"	Cem.	\$34.02
	374	12"	Clay	565.26
	318	10"	"	
				\$599.28
Thompson st., south from Worthington ....	603	12"	Cem.	638.27
St. James ave. to Bay.....	708	15"	"	675.99
State to Bay.....	852	12"	"	653.12
				1,967.38
Tyler st., Oak to Hancock....	717	15"	"	1,089.25
	663	12"	"	
Hancock to Eastern ave...	601	18"	"	778.27
	795	15"	"	644.31
east from Eastern ave.....	251	10"	"	139.49
				2,651.82
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st. ....	2,024	3'-4" x 5'-0"	Brick	
	302	2'-6" x 3'-6"	"	
	2,688	2'-0" x 3'-0"	"	27,384.14
	848	1'-8" x 2'-6"	"	
Union st., Oak to Orleans....	404	15"	Cem.	467.96
Stebbins to Orleans .....	428	20"	Clay	737.72
Hancock to Stebbins.....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	"	
Hancock to Eastern ave...	600	18"	Cem.	1,413.45
	800	15"	"	
east from Eastern ave.....	248	10"	Clay	152.56
				34,458.84
Vassar st., north from Harvard (flush gate) .....	550	12	Cem.	89.81
Vernon st., east from Water	639	15"	"	795.08
west from Main.....	216	12"	"	310.68
				1,105.76
Vine st.....	697	12"	"	602.45
Vinton st., Liberty to Franklin	357	12"	Clay	357.63
	262	10"	"	227.15
				584.78
Walnut st., south from State	69	....	Brick	95.23
north from Charter ave ...	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak.....	17	12"	"	20.50
	558	24"	Clay	792.64
Cedar to Oak.....	1,142	2'-0" x 3'-0"	Brick	4,956.57
	272	18"	Cem.	410.04
from Cedar to below Han- cock .....	784	15"	"	1,073.88
	100	12"	"	
north from Florence.....	53	8"	Cem.	27.12



## SEWER CONSTRUCTION.—CONTINUED

NAME OF SEWER.	Length in Feet.	Size.	Material.
Walnut st., Hickory to Florence.....	1,026	12"	Clay
north from Manhattan.....	249	10"	"
Walter st., east from Birnie ave.	285	12"	Cem.
Waltham ave., south from Wilbraham road .....	546	12"	Clay
Wareham st., south from Grand ave.....	419	10"	"
Warner place, west from Fort Pleasant ave.....	508	12"	"
	198	10"	"
extension to Long Hill st...	89	10"	"
Warriner ave., east from Locust st .....	448	12"	"
Washburn st., Conn. river to Conn. R. R. R. ....	1,758	7'-0", cir.	Brick
Washington ave. (see Long Hill st.)			
Wason ave., Conn. river to Plainfield st.....	421	3'-10" x 5'-9"	"
Plainfield st. to Fisk ave...	1,051	3'-4" x 5'-0"	"
Fisk to Birnie .....	634	3'-2" x 4'-9"	"
Birnie to North Main st ..	247	2'-0" x 3'-0"	"
Water st., Gardner to Loring .....	474	1'-10" x 2'-9"	"
north from Loring .....	345	12"	Cem.
Margaret to near State...	721	2'-0" x 3'-0"	Brick
	868	18"	Cem.
south from Elm.....	275	18"	"
Elm to Pyncheon.....	43	2'-0" x 3'-0"	Brick
	353	2'-6" x 3'-6"	"
north from Pyncheon .....	584	18"	Cem.
north from Worthington...	648	15"	"
	61	12"	"
south from Worthington..	225	12"	"
Water st. extension.....	....	18"	Clay
Waverly st., from North Main to Chestnut .....	473	20"	"
	487	10"	"
Webster st., Liberty to Franklin .....	601	12"	
Welcome place, north from Bay st .....	238	8"	
Wellesley st., east from Cornell st. (flush gate and well holes) .....	373	12"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellington ave., south from Wilbraham road.....	287 244 291	15" 12" 10"	Clay " } " }	....
Wendell ave., east from Main st .....	458	15"	"	....
Westford ave., south from Wilbraham road .....	300 300 350	15" 12" 10"	" } " } " }	\$676.23
Westminster st., south from Bay .....	800	12"	Cem.	\$840.69
south from St. James ave..	773	12"	"	700.02
				1,540.71
White st., Allen to Orange...	747	24"	Clay	1,717.86
	674	20"	"	1,490.97
	274	18"	"	389.27
south from Orange.....	388	15"	"	275.78
extension to Dawson ave ..	292	15"	"	3,873.83
				257.32
Whitney ave.....	450	12"	Cem.	
Wilbraham ave., south from Wilbraham road .....	1,125	12"	Clay	874.50
Alden st. to Beverly.....	999 1,180	10" 8"	" } " }	1,121.36
				1,995.86
Wilbraham road, east from State st.....	248	12"	Cem.	157.73
State to Northampton.....	1,451	2'-0"x3'-0"	Brick	6,198.76
east from Northampton ave.	472	2'-6"x3'-9"	"	
	476	2'-4"x3'-6"	"	
	478	2'-2"x3'-3"	"	8,927.51
	473	2'-0"x3'-0"	"	
	254	1'-10"x2'-9"	"	
	256	1'-8"x2'-6"	"	
east from brick sewer.....	263	20"	Clay	859.35
	405	12"	"	16,143.35
Wilcox st., east from Water	548	15"	Cem.	
	327	12"	"	891.89
west from Water.....	463	12"	"	205.76
Willard ave., south from Shat- tuck .....	215	8"	Clay	1,097.65
north from State.....	282	18"	"	
	300	15"	"	785.26
	241	12"	"	785.26

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut st., Hickory to Florence.....	1,026	12"	Clay	\$992.67
north from Manhattan.....	249	10"	"	188.52
				<u>\$9,457.</u>
Walter st., east from Birnie ave.	285	12"	Cem.	14.
Waltham ave., south from Wilbraham road.....	546	12"	Clay	598.
Wareham st., south from Grand ave.....	419	10"	"	....
Warner place, west from Fort Pleasant ave.....	508	12"	"	}
	198	10"	"	
extension to Long Hill st...	89	10"	"	51.88
				<u>51.</u>
Warriner ave., east from Locust st.....	448	12"	"	399.
Washburn st., Conn. river to Conn. R. R. R. ....	1,758	7'-0", cir.	Brick	21,678.
Washington ave. (see Long Hill st.)				
Wason ave., Conn. river to Plainfield st.....	421	3'-10" x 5'-9"	"	}
Plainfield st. to Fisk ave...	1,051	3'-4" x 5'-0"	"	
Fisk to Birnie.....	634	3'-2" x 4'-9"	"	
Birnie to North Main st..	247	2'-0" x 3'-0"	"	
Water st., Gardner to Loring.....	474	1'-10" x 2'-9"	"	1,182.58
north from Loring.....	345	12"	Cem.	237.38
Margaret to near State...	721	2'-0" x 3'-0"	Brick	}
	868	18"	Cem.	2,284.34
south from Elm.....	275	18"	"	....
Elm to Pyncheon.....	43	2'-0" x 3'-0"	Brick	198.00
	353	2'-6" x 3'-6"	"	2,949.29
north from Pyncheon..	584	18"	Cem.	}
north from Worthington...	648	15"	"	
	61	12"	"	
south from Worthington..	225	12"	"	233.50
				<u>8,939.</u>
Water st. extension.....	....	18"	Clay	8.
Waverly st., from North Main to Chestnut.....	473	20"	"	}
	487	10"	"	
Webster st., Liberty to Franklin.....	601	12"	"	395.
Welcome place, north from Bay st.....	238	8"	"	....
Wellesley st., east from Cornell st. (flush gate and well holes).....	373	12"	Cem.	64.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellington ave., south from Wilbraham road.....	287 244 291	15" 12" 10"	Clay " } " }	....
Wendell ave., east from Main st .....	458	15"	"	....
Westford ave., south from Wilbraham road.....	300 300 350	15" 12" 10"	" } " } " }	\$676.23
Westminster st., south from Bay .....	800 773	12" 12"	Cem. "	\$840.69 700.02
White st., Allen to Orange...	747 674 274 388	24" 20" 18" 15"	Clay " } " }	1,717.86 1,490.97 389.27
extension to Dawson ave ..	292	15"	"	275.78
Whitney ave.....	450	12"	Cem.	3,873.83
Wilbraham ave., south from Wilbraham road .....	1,125	12"	Clay	874.50
Alden st. to Beverly.....	999 1,180	10" 8"	" } " }	1,121.36
Wilbraham road, east from State st.....	248	12"	Cem.	157.73
State to Northampton.....	1,451	2'-0"x3'-0"	Brick	6,198.76
east from Northampton ave.	472 476 478 473 254 256 263 405	2'-6"x3'-9" 2'-4"x3'-6" 2'-2"x3'-3" 2'-0"x3'-0" 1'-10"x2'-9" 1'-8"x2'-6" 20" 12"	" } " } " } " } " } " } Clay " }	8,927.51 859.35
east from brick sewer.....				16,143.35
Wilcox st., east from Water	548 327	15" 12"	Cem. } " }	891.89
west from Water.....	463	12"	"	205.76
Willard ave., south from Shat- tuck .....	215	8"	Clay	....
north from State.....	282 300 241	18" 15" 12"	" } " } " }	785.26 785.26

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
William st.....	1,576	12"	Cem.	\$1,435.86
west from Water.....	76	15"	"	459.79
	425	12"	"	
				\$1.89
* Willow st., Cross to State ..	413	12"	Clay	791.42
Cross to Park.....	265	12"	"	378.17
Union to Park.....	216	18"	Cem.	325.32
south from Union.....	220	15"	"	302.28
				1.79
Winchester st.....	424	12"	Clay	357.96
Windsor ave., south from State st.....	349	10"	"	222.90
Windsor st., west from Knox	80	15"	Cem.	
	485	10"	"	
Winthrop st.....	52	18"	"	
	141	15"	"	
	520	....	Stone	22
Woodside ave., north from Belmont ave.....	451	10"	Clay	32
Worcester ave., Plainfield to Birnie ave.....	1,486	15"	Cem.	5
Worcester st., I. O., east from Oak.....	275	12"	Clay	
	212	10"	"	519.07
east from Pine.....	546	20"	"	768.42
				1.28
Worthington st., submerged outlet.....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
Conn. river to Main st.....	1,038	5'-7"x7'-0"	Brick	
Main to Dwight.....	821	5'-4"x7'-0"	"	33,410.12
Dwight to Garden brook ..	566	4'-0"x6'-0"	"	
from Dwight st. to east of Chestnut.....	530	5'-0"x5'-3"	"	3,015.70
extension to Spring st.....	738	4'-3"	"	
including Spring st., north from Worthington.....	35	5'-0"	"	4,361.35
Spring st., south from Worth- ington.....	47	2'-0"x3'-0"	"	
east from main sewer.....	804	18"	Cem.	
	242	15"	"	1,508.23
	251	12"	"	
near Autumn st.....	472	12"	"	496.13
near Sackett's ave.....	348	15"	"	
	145	10"	"	378.99
Sackett's ave. to Federal st.	1,131	12"	"	1,113.49
head of Magazine.....	158	18"	"	375.10

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington st., near Maga- zine, to St. James ave....	248	2'-8" x 4'-0"	Brick	\$12,493.94
	354	2'-1" x 3'-1½"	"	
	1,614	3'-4" x 5'-0"	"	
Yale st., Dartmouth to Har- vard .....	350	15"	Cem.	555.06
Harvard to Princeton.....	842	12"	"	75.83
north from Princeton.....	712	12"	Clay	452.46
York st.....	1,203	7' 8", cir.	Brick	1,083.35
				13,912.27
Total.....	497,145			\$1,125,691.98

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material
Elliptical shaped.....	635	7'- 3"x4'- 10"	Brick and cem.
" " " " " " " " " " " "	1,080	7'- 0"x4'- 8"	" "
" " " " " " " " " " " "	1,170	6'- 9"x4'- 6"	" "
" " " " " " " " " " " "	1,038	5'- 7"x7'- 0"	" "
" " " " " " " " " " " "	821	5'- 4"x7'- 0"	" "
" " " " " " " " " " " "	460	4'- 10"x7'- 3"	" "
" " " " " " " " " " " "	869	4'- 8"x7'- 0"	" "
" " " " " " " " " " " "	1,040	4'- 4"x6'- 6"	" "
" " " " " " " " " " " "	1,980	4'- 2"x6'- 3"	" "
" " " " " " " " " " " "	750	3'- 8"x5'- 6"	" "
" " " " " " " " " " " "	131	3'- 6"x5'- 3"	" "
" " " " " " " " " " " "	16	2'- 10"x4'- 3"	" "
Egg shaped.....	566	4'- 0"x6'- 0"	" "
" " " " " " " " " " " "	1,101	3'- 10"x5'- 9"	" "
" " " " " " " " " " " "	2,345	3'- 8"x5'- 6"	" "
" " " " " " " " " " " "	3,381	3'- 6"x5'- 3"	" "
" " " " " " " " " " " "	11,200	3'- 4"x5'- 0"	" "
" " " " " " " " " " " "	1,592	3'- 2"x4'- 9"	" "
" " " " " " " " " " " "	2,877	3'- 0"x4'- 6"	" "
" " " " " " " " " " " "	2,028	2'- 10"x4'- 3"	" "
" " " " " " " " " " " "	364	2'- 9"x4'- 11"	" "
" " " " " " " " " " " "	2,780	2'- 8"x4'- 0"	" "
" " " " " " " " " " " "	3,136	2'- 6"x3'- 9"	" "
" " " " " " " " " " " "	655	2'- 6"x3'- 6"	" "
" " " " " " " " " " " "	150	2'- 5"x3'- 7 1/2"	" "
" " " " " " " " " " " "	8,019	2'- 4"x3'- 6"	" "
" " " " " " " " " " " "	6,894	2'- 2"x3'- 3"	" "
" " " " " " " " " " " "	603	2'- 1"x3'- 11"	" "
" " " " " " " " " " " "	20,425	2'- 0"x3'- 0"	" "
" " " " " " " " " " " "	3,092	1'- 10"x2'- 9"	" "
" " " " " " " " " " " "	2,382	1'- 8"x2'- 6"	" "
" " " " " " " " " " " "	917	1'- 6"x2'- 3"	" "
Box with semi-circular top..	530	5'- 0"x5'- 3"	Plas
Segmental .....	89	6'- 0"x4'- 3"	B
" " " " " " " " " " " "	60	5'- 0"x2'- 1"	"
Miscellaneous shapes.....	10,824	4'- 0" and under	
Circular.....	3,017	7' 0"	
" " " " " " " " " " " "	3,019	6'- 6"	
" " " " " " " " " " " "	1,330	6'- 0"	
" " " " " " " " " " " "	1,743	5' 9"	
" " " " " " " " " " " "	3,842	5'- 6"	
" " " " " " " " " " " "	948	5'- 3"	
" " " " " " " " " " " "	2,257	5'- 0"	
" " " " " " " " " " " "	3,274	4' 6"- 10'	
" " " " " " " " " " " "	1,762	4'- 6"	
" " " " " " " " " " " "	3,362	4'- 3"	
" " " " " " " " " " " "	952	4'- 1"	

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	2,399	4'-0"	Brick and cement mortar.
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	40	2'-0"	" " "
" .....	19,984	24"	Clay pipe.
" .....	12,948	20"	" "
" .....	13,265	18"	" "
" .....	27,953	15"	" "
" .....	67,406	12"	" "
" .....	47,952	10"	" "
" .....	13,124	8"	" "
" .....	475	6"	" "
" .....	29,058	18"	Cement pipe.
" .....	48,458	15"	" "
" .....	77,781	12"	" "
" .....	5,163	10"	" "
" .....	777	8"	" "
" .....	96	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	550	24"	Wood pipe.
" .....	290	18"	" "
Total.....	497,145		

Classified as follows: —

	Feet.	Miles.
Brick and cement mortar, . . . . .	118,588	22.46
Miscellaneous materials, . . . . .	14,213	2.70
Clay pipe, . . . . .	203,007	38.44
Cement pipe. . . . .	161,237	30.53
Total, . . . . .	497,145	94.13



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City of Springfield.

THIRTY-THIRD ANNUAL REPORT

OF THE



SUPERINTENDENT

OF

STREETS AND SEWERS

TO

THE CITY COUNCIL,

FOR THE YEAR 1901



PRESS OF

SPRINGFIELD PRINTING AND BINDING CO.

SPRINGFIELD, MASS.

1902.

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1900

# THIRTY-THIRD ANNUAL REPORT

## OF THE

# STREET DEPARTMENT.

Savannah, Ga., December 22, 1901

COMPLIMENTS OF

ARTHUR A. ADAMS,

Superintendent of Streets and Sewers.

Steam rollers,	(special)	5,000 00
		<u>\$278,843 75</u>

The various classifications of work, together with their respective quantities, are as follows:—

Macadam and gravel, resurfacing,	37,645 sq. yds.
Gravel roadways,	22,528 “ “
Macadam roadways,	95,009 “ “
Brick pavements,	14,500 “ “
Wood block pavement,	2,780 “ “
Granite block pavement,	2,635 “ “



New crosswalks,	61
Brick sidewalks (new),	5,625 feet
Tar concrete sidewalks,	4,846 "
Sidewalks relaid,	33,919 "
New curb,	20,569 "
Curb reset,	23,246 "

For descriptions and itemized costs of the above, you are referred to another part of this report.

The necessity for storage facilities on the lines of the several railroads, and a city yard large enough to serve the needs of the department, is again brought to your attention.

Wood block pavement has been laid in Main street between Lyman and Liberty streets, for the purpose of experiment, and, while it is best adapted to streets comparatively level, its smooth surface and noiseless quality is certainly meritorious and appreciated. Its wearing quality cannot be determined in the short period during which it has been in use.

Street watering by the municipality has been undertaken, for the first time, and, as predicted in my communication to your honorable body on January 28, 1901, it has cost more, but has probably given better satisfaction than when done by contract.

A portion of the dike southerly from Lowell street has been re-enforced with a banquettes where indications of weakness were detected during the freshets of April and May.

An ordinance passed October 1, 1901, authorized the appointment of a Second Assistant Superintendent of Streets, and Mr. A. H. Woodward was appointed to fill the position. To him and to Mr. Michael Roane, Assistant Superintendent of Streets and Sewers, my thanks are expressed for valuable services rendered.

I would also express my appreciation of the many courtesies extended during the year by Mayor W. P. Hayes, Alderman F. D. Kemp and Councilman C. P. Kibbe, members of the Board of Supervisors of Highways and Bridges.

## GRADING AND GRAVELING.

	Lengths in feet.	Areas in sq. yds.	Cost.
Cherry lane, Central to Mill, including cobble gutter and retaining wall,	1,479	3,041	\$1,904 24
Sumner avenue, White to Allen,	4,764	15,820	6,631 37
Orange street, Highland street to culvert,	1,100	3,367	947 25
Total,	7,343	22,228	\$9,482 86

## MACADAM ROADWAYS.

	Lengths in feet	Areas in sq. yds.	Cost.
Alden street, east of railroad,	660	2,200	\$1,640 75
Allen street, White street to Randall ave.,	1,331	4,427	2,961 20
Avon place, Maple street easterly,	643	2,537	988 26
Bancroft street, North Main to Chestnut,	1,436	4,865	1,375 96
Belmont avenue, Woodside ave. to Hall st.,	1,356	3,371	2,563 90
Bradford street, Plainfield to Fulton,	741	2,472	1,004 63
Cass street, Liberty to Butler,	1,762	5,407	2,677 96
Catharine street, Bay to Dartmouth,	150	493	218 80
Dartmouth street, Bay to St. James ave.,	1,132	5,159	2,153 64
Fisk avenue, Wason to Talcott avenue,	1,126	5,005	3,577 57
Fulton street, Vine to Plainfield,	2,400	8,025	4,740 80
Greenwood street, Main to Chestnut,	1,561	5,026	3,168 76
Jefferson avenue, North Main to Chestnut,	1,275	6,375	2,053 84
Magazine street, Lincoln to Armory,	734	2,434	1,592 17
Margaret street, Main to Water,	842	2,807	1,345 43
Massasoit street, incomplete,			496 35
Morris street, Main to Dale,	740	2,344	1,593 86
Norwood street, Main to Hanover,	1,117	2,911	1,346 35
Oak street, I. O., Worcester to Berkshire,	745	2,648	1,748 15
Rutledge avenue,	516	1,599	1,181 36
School street, State to High, exclusive of grading,	515	1,697	782 31
Seventh street, Main to Fulton,	822	2,529	1,305 65
Sherman street, State to Bay,	1,528	5,078	3,232 27
St. James avenue, Harvard street to rail- road bridge,	1,199	4,618	2,911 30
Temple street, Maple to School,	953	2,570	602 01
Union street, Oak to Eastern avenue,	2,471	8,412	4,259 71
Total,	27,755	95,009	\$51,522 99

Of this amount, \$1,900.95 is chargeable to the Springfield Street  
Railway Company.



The following table shows the lengths and areas of streets in which macadam has been abandoned:—

	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Main street, . . . . .	1,418	2,962	473
Worthington street, . . . . .	1,020	2,111	842
Total, . . . . .	2,438	5,073	1,315

### ROADWAYS RESURFACED WITH MACADAM AND GRAVEL.

	Lengths in feet.	Areas in sq. yds.	Cost.
Armory street, Wolcott street to Warwick avenue, . . . . .	600	2,000	\$261 47
Bay street, Westminster to Princeton, . . . . .	2,175	7,250	1,161 12
Dartmouth terrace, east side, Worthington street, northerly, . . . . .	460	1,022	249 56
Eastern avenue, King to Alden, . . . . .	1,237	4,120	288 19
Franklin street, Main to Chestnut, . . . . .	1,570	4,884	1,179 78
Fulton street, Vine street to 100 feet south of Clinton street, . . . . .	270	900	261 42
Hancock street, Lebanon to Walnut, . . . . .	850	2,933	340 77
Liberty street, driveway entrance to rail- way station to Chestnut street, . . . . .	1,220	4,066	1,040 43
Montrose street, Burr to State, . . . . .	750	2,500	321 84
Myrtle street, I. O., Hampden to Essex, . . . . .	850	3,400	450 47
Pecousic avenue, . . . . .	797	2,657	581 35
State street, School street to top of hill, . . . . .	1,330	1,913	417 50
Total, . . . . .	12,109	37,645	\$6,503 90

Of this amount, \$230.95 is chargeable to the Sewer Department and \$417.50 to the Springfield Street Railway Company.

### NEW GUTTERS.

	Sq. yds.
Avon place, brick, . . . . .	67
Cherry lane, cobble, . . . . .	774
Oak Street, I. O., cobble, . . . . .	228
Total, . . . . .	1,069

## PAVING.

	Lengths in feet.	Areas in sq. yds.	Cost.
Belmont avenue, Woodside avenue to Hall street, Catskill brick blocks,	1,362	1,211	\$2,689 25
Liberty street, Cass street to Heywood avenue, Syracuse brick,	1,147	3,971	9,313 20
Main street, Emery to Sargeant, west side, Catskill brick blocks,	1,447	5,449	11,877 69
Main street, Liberty to Lyman, wood blocks,	484	2,780	8,688 22
Summer street, Kibbe avenue to 85 feet west of Federal street, granite blocks,	787	2,635	2,570 38
Worthington street, Dwight to Fairbanks avenue, Syracuse brick,	1,060	3,869	8,758 62
Total,	6,287	19,915	\$43,897 36

Of this amount, \$2,284.35 is chargeable to the Springfield Street Railway Company.

The following table shows the lengths and areas of streets in which paving has been abandoned:—

	Lengths in feet.	Areas in sq. yds
Main street, Lyman to Liberty, granite block, . . . . .	427	1,867
School street, State to High, Syracuse brick, . . . . .	515	1,697
Total, . . . . .	942	3,564

## COMBINED STREET EXPENDITURES.

Those streets on which a sum less than \$20.00 has been expended are included in "Sundry Streets."

	Cost.
Alden street, macadam, inlets and macadam repairs, .	\$1,648 12
Alderman street, inlets, . . . . .	20 39
Alexander street, gravel repairs, . . . . .	34 28
Allen street, macadam, macadam, gravel and general repairs,	3,852 20
Amherst street, gravel repairs, . . . . .	20 77

Andrew street, gravel and general repairs, . . . . .	\$67 15
Armory street, inlets, macadam, gravel and general repairs, . . . . .	211 41
Avon place, macadam and general repairs, . . . . .	1,003 15
Bancroft street, macadam, inlet, macadam and general repairs, . . . . .	1,394 07
Bond street, macadam repairs, . . . . .	37 22
Bay street, inlets, macadam, gravel and general repairs, . . . . .	1,419 85
Belmont avenue, macadam, brick, inlets, macadam, gravel and general repairs, . . . . .	6,037 43
Berkshire street, I. O., gravel and general repairs, . . . . .	412 65
Birnie avenue, inlet and gravel repairs, . . . . .	20 11
Boston road, gravel and general repairs, . . . . .	815 41
Bowdoin street, gravel repairs, . . . . .	37 32
Bowles street, gravel repairs, . . . . .	23 41
Bradford street, macadam and inlet, . . . . .	1,004 63
Bridge street, repairing gutters and macadam repairs, . . . . .	144 13
Buckingham street, gravel repairs, . . . . .	37 24
Burcham Bend road, gravel and general repairs, . . . . .	608 78
Butler street, macadam and general repairs, . . . . .	22 43
Butler street, I. O., gravel and general repairs, . . . . .	87 94
Carew street, macadam, gravel and general repairs, . . . . .	84 26
Cass street, macadam, inlets, gravel and general repairs, . . . . .	2,802 05
Catharine street, macadam, . . . . .	218 30
Central street, macadam, gravel and general repairs, . . . . .	125 34
Cherry lane, grading, graveling, paving gutters, walks, general and gravel repairs, . . . . .	1,925 47
Chestnut street, inlet, macadam, gravel and general repairs, . . . . .	232 78
Cooley street, gravel and general repairs, . . . . .	257 06
Congress street, macadam and general repairs, . . . . .	45 57
Cornell street, inlets, macadam and gravel repairs, . . . . .	139 54
Court street, repairing gutters, macadam and general repairs, . . . . .	98 80
Crystal avenue, gravel repairs, . . . . .	94 45
Dartmouth terrace, inlets and macadam repairs, . . . . .	167 33
Dartmouth street, macadam and gravel repairs, . . . . .	2,207 69
Dexter street, macadam repairs, . . . . .	42 8'
Dickinson street, repairing gutters, macadam, gravel and general repairs, . . . . .	91
Dipping Hole road, gravel and general repairs, . . . . .	26
Dwight road, gravel repairs, . . . . .	3'
Eastern avenue, macadam repairs, . . . . .	3
Edward street, gravel repairs, . . . . .	

## REPORT ON STREETS.

9

Emery street, macadam and general repairs, . . . . .	\$26 45
Essex street, I. O., inlets and gravel repairs. . . . .	42 16
Fairfield street, gravel repairs, . . . . .	405 92
Ferry street, inlet, repairing gutters, macadam and general repairs, . . . . .	98 15
Fisk avenue, macadam, inlet and macadam repairs, . . . . .	3,584 94
Florida street, inlets and gravel repairs, . . . . .	65 30
Forest avenue, inlets and gravel repairs, . . . . .	124 97
Fort Pleasant avenue, macadam, gravel and general repairs, . . . . .	174 41
Franklin street, repairing gutters, macadam and general repairs, . . . . .	1,281 96
Fulton street, macadam, inlets, macadam and general repairs, . . . . .	5,059 28
Garfield street, gravel repairs, . . . . .	26 92
Greenwood street, macadam, inlets, and relaying gutter, . . . . .	3,168 76
Grove street, gravel repairs, . . . . .	20 90
Hampden street, macadam repairs, . . . . .	37 06
Hampden street, I. O., gravel and general repairs, . . . . .	40 89
Hancock street, inlet and macadam repairs, . . . . .	371 60
Harrison avenue, macadam repairs, . . . . .	29 75
Harvard street, gravel repairs, . . . . .	22 79
Hickory street, inlet and gravel repairs, . . . . .	20 96
High street, macadam and gravel repairs, . . . . .	51 72
Highland street, gravel repairs, . . . . .	25 25
Hillman street, inlet, repairing gutters, macadam and general repairs, . . . . .	45 77
Ingersoll Grove, gravel repairs, . . . . .	38 21
Jefferson avenue, macadam, inlets, macadam and gravel repairs, . . . . .	2,129 77
Kibbe avenue, gravel repairs, . . . . .	21 88
Liberty street, brick paving, inlets, macadam, gravel and general repairs, . . . . .	10,033 34
Loring street, macadam repairs, . . . . .	26 72
Lyman street, macadam and general repairs, . . . . .	164 59
Magazine street, macadam, inlet, gravel and general repairs, . . . . .	1,608 45
Magnolia terrace, inlet and gravel repairs, . . . . .	48 40
Main street, Emery to Sargeant, brick paving and inlets, . . . . .	11,877 69
Main street, Liberty to Lyman, paving and inlets, . . . . .	8,688 22
Main street, macadam and general repairs, . . . . .	466 64
Main street, I. O., inlets, macadam, gravel and general repairs, . . . . .	411 08

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Maple street, macadam and general repairs, . . . .	\$84 88
Margaret street, macadam, repairing inlets, macadam and gravel repairs, . . . . .	1,430 86
Market street, macadam repairs, . . . . .	45 46
Massasoit street, macadam, inlets and gravel repairs, . .	503 82
Mattoon street, inlet, repairing gutters and macadam repairs, .	49 66
Mill street, macadam and general repairs, . . . . .	111 71
Montrose street, gravel repairs, . . . . .	362 21
Morris street, macadam, inlets and macadam repairs, . .	1,600 64
Mulberry street, macadam and gravel repairs, . . . .	24 34
Murray Hill avenue, gravel repairs, . . . . .	32 71
Myrtle street, I. O., inlets, gravel and general repairs, .	611 49
North Main street, macadam and general repairs, . . .	326 92
Norwood street, macadam, inlet and macadam repairs, . .	1,355 48
Oak street, general repairs, . . . . .	25 17
Oak street, I. O., macadam, inlet, macadam, gravel and general repairs, . . . . .	1,820 07
Orange street, grading and graveling and gravel repairs, .	894 17
Orleans street, inlet and gravel repairs, . . . . .	32 35
Palmer avenue, inlets, . . . . .	66 40
Parker street, gravel and general repairs, . . . . .	521 67
Pasco street, inlets, gravel and general repairs, . . . .	151 14
Patton street, macadam repairs, . . . . .	42 74
Pearl street, macadam repairs, . . . . .	39 58
Pecousic avenue, macadam repairs, . . . . .	531 35
Pine street, macadam repairs, . . . . .	39 22
Plainfield street, inlets, macadam, gravel and general repairs, .	296 20
Pleasant street, gravel repairs, . . . . .	25 26
Plumtree road, gravel and general repairs, . . . . .	134 90
Princeton street, gravel repairs, . . . . .	104 86
Pyncheon street, macadam repairs, . . . . .	24 36
Rutledge avenue, macadam, inlet and macadam repairs, . .	1,204 84
Sanford street, repairing gutters and macadam repairs, . .	22 91
School street, macadam and general repairs, . . . . .	1,219 83
Seventh street, macadam and gravel repairs, . . . . .	1,308 76
Sharon street, inlet and macadam repairs, . . . . .	29 4'
Sherman street, macadam, inlets, and macadam repairs, . .	3,239
South street, repairing gutters, repairing arch, macadam and gravel repairs, . . . . .	1,573
Springfield street, inlet, macadam and gravel repairs, . .	34'
State street, macadam, gravel and general repairs, . . . .	4'

St. James avenue, macadam, inlets, macadam and gravel repairs, . . . . .	\$2,935 57
Summer street, paving, inlets, macadam and general repairs, . . . . .	2,909 65
Sumner avenue, inlets, macadam, gravel and general repairs, . . . . .	442 69
Sumner avenue extension, . . . . .	6,631 37
Sundry streets, cleaning, . . . . .	24,912 00
Sundry streets, general repairs, . . . . .	7,274 26
Sundry streets, winter expenses, . . . . .	8,956 09
Taylor street, repairing gutters and macadam repairs, . . . . .	206 00
Temple street, macadam and gravel repairs, . . . . .	609 12
Thompson street, macadam and gravel repairs, . . . . .	93 22
Tinkham road, gravel and general repairs, . . . . .	380 93
Tyler street, gravel repairs, . . . . .	23 50
Union street, macadam, inlets, repairing inlets, macadam and gravel repairs, . . . . .	4,329 33
Vernon street, macadam and general repairs, . . . . .	25 09
Walnut street, macadam and general repairs, . . . . .	167 06
Water street, macadam and general repairs, . . . . .	155 05
Webster street, gravel repairs, . . . . .	31 47
Westminster street, gravel repairs, . . . . .	47 45
White street, gravel and general repairs, . . . . .	167 55
Wilbraham avenue, inlets and gravel repairs, . . . . .	31 77
Wilbraham road, inlets, macadam, gravel and general repairs, . . . . .	1,040 55
Wilcox street, macadam repairs, . . . . .	26 72
Willow street, macadam repairs, . . . . .	75 08
Worcester street, I. O., inlets, gravel and general repairs, . . . . .	185 91
Worthington street, paving, inlets, repairing gutters, macadam and general repairs, . . . . .	9,059 89
Total, . . . . .	<u>\$170,213 20</u>

The above expenditures are summarized as follows:—

Cleaning streets, . . . . .	\$24,912 00
Repairs, . . . . .	30,411 96
Winter expenses, . . . . .	8,956 09
New construction, . . . . .	105,933 15
	<u>\$170,213 20</u>

## SIDEWALKS.

Sidewalks have been laid in the following streets:—

Andrew street,  
Armory street,  
Belmont avenue, curbing,  
Carew street, relaid,  
Cass street, relaid,  
Chestnut street, relaid,  
Dickinson street,  
Emery street, relaid,  
Everett street, relaid,  
Fisk avenue, curbing,  
Franklin street, relaid,  
Fulton street, curbing,  
Granville street, curbing,  
Greenwood street, relaid,  
Grover street, tar concrete,  
Hickory street,  
Liberty street, relaid,  
Magazine street, curbing,  
Main street, kiolithic,  
Margaret street, relaid,  
Massasoit street,  
Mattoon street, relaid,  
Mill street, tar concrete,  
Montmorenci street, curbing,  
Morris street, curbing,  
Nelson avenue,  
North Main street, relaid,  
Norwood street, relaid,  
Oak street, I. O., tar concrete,  
Oakland street, tar concrete,  
Seventh street, relaid,  
Sharon street, relaid,  
St. James avenue, curbing,  
Summer street,  
Union street, curbing,

Water street, curbing,

Worthington street, kiolithic and brick relaid.

The cost of these walks chargeable to abutters was \$21,-676.97 for labor and material, and 685,957 new brick have been used in their construction.

## CURBSTONE.

	4"	6"
	Length in feet.	Length in feet.
Armory street, . . . . .	1,337	
Bay street, . . . . .	58	
Belmont avenue, . . . . .	432	
Bowles street, . . . . .	56	
Cass street, . . . . .	1,600	11
Dickinson street, . . . . .	189	
Emery street, . . . . .		41
Fisk avenue, . . . . .	1,114	
Forest avenue, . . . . .	77	
Fulton street, . . . . .	421	247
Granville street, . . . . .	561	
Hall street, . . . . .	69	
Hampden street, . . . . .	9	
Harrison avenue, . . . . .		12
Liberty street, . . . . .	212	
Magazine street, . . . . .	1,613	
Main street, . . . . .	51	117
Margaret street, . . . . .	539	796
Massasoit street, . . . . .	797	
Mill street, . . . . .		746
Montmorenci street, . . . . .	410	
Morris street, . . . . .	1,391	
Mulberry street, . . . . .	116	
Nelson avenue, . . . . .	183	
Oakland street, . . . . .	877	
Orange street, . . . . .	170	
Park avenue, . . . . .	12	
Princeton street, . . . . .	6	
Quincy street, . . . . .	356	
St. James avenue, . . . . .	192	
Sumner avenue, . . . . .	116	



	4"	6"
	Length in feet.	Length in feet.
Union street, . . . . .	3,225	
Water street, . . . . .		680
Webster street, . . . . .	522	
White street, . . . . .	1,000	
Worthington street, . . . . .		208
	<u>17,711</u>	<u>2,858</u>

In addition to the above, 23,246 feet of old curbing have been reset.

### NEW CROSSWALKS.

Sixty-one new crosswalks have been built, in which 36,926 local brick and 69,224 vitrified brick were used.

### MAINTENANCE ACCOUNT.

#### RECEIPTS.

From appropriation, . . . . .	\$53,000 00	
From Street Railway Company, corporation tax, . . . . .	22,660 60	
From paving account, transferred, . . . . .	2,000 00	
From contingent account (for Mill river arch), } . . . . .	3,500 00	
From contingent account (resurfacing), } . . . . .		
From other departments, accounts and private parties, . . . . .	6,987 76	
	<u>          </u>	\$88,148 36

#### EXPENDITURES.

Bridges (small repairs), . . . . .	\$320 11
City teams, . . . . .	4,859 16
City yard, . . . . .	2,234 76
Department and general expenses, . . . . .	2,768 92
North End bridge, . . . . .	41 39
Old Toll bridge, . . . . .	403 60
Salary, . . . . .	1,800 00
Scales, . . . . .	541 40
	<u>          </u>
Amount carried forward, . . . . .	\$12,969 34

Amount brought forward,	\$12,969 34	
Shed and supplies for rollers, . . . . .	736 47	
South End bridge, . . . . .	1,224 56	
Streets, . . . . .	64,280 05	
Street sweeper and water cart (repairs and renewals), . . . . .	1,411 36	
Tools, . . . . .	1,446 75	
Work and material for other departments and accounts, . . . . .	3,958 45	
Work and material for private parties, . . . . .	3,752 95	
Transferred to walks and curbing account,	500 00	
	<u>\$90,279 93</u>	
Less material on hand, December 10, 1900,	2,378 35	
	<u>\$87,901 58</u>	
Amount unexpended, . . . . .	246 78	\$88,148 36

## MACADAM AND GRAVEL ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$53,000 00	
From paving account, transferred, . . . . .	1,500 00	
From other departments, accounts and private parties, . . . . .	3,151 79	
	<u>          </u>	\$57,651 79

## EXPENDITURES.

Department and general expenses, . . . . .	15 40	
Engineering department, . . . . .	147 64	
Material, . . . . .	842 75	
Streets, . . . . .	50,606 16	
Tools, . . . . .	1,026 35	
Work and material for other departments and accounts, . . . . .	2,713 74	
Work and material for private parties, . . . . .	1,112 12	
Transferred to walks and curbing account,	950 00	
	<u>\$57,414 16</u>	
Amount unexpended, . . . . .	237 63	\$57,651 79

## PAVING ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$53,000 00	
From other departments, accounts and private parties, . . . . .	271 41	
	<hr/>	\$53,271 4

## EXPENDITURES.

General expense, . . . . .	\$161 04	
Engineering department, . . . . .	247 45	
Material, . . . . .	1,133 10	
Streets, . . . . .	46,531 38	
Tools, . . . . .	143 37	
Work and material charged to private parties, . . . . .	263 37	
Work and material charged to other departments, . . . . .	68 05	
Transferred to macadam and gravel account, . . . . .	1,500 00	
Transferred to maintenance account, . . . . .	2,000 00	
Transferred to walks and curbing account, . . . . .	1,150 00	
	<hr/>	\$53,197 76
Amount unexpended, . . . . .	73 65	
	<hr/>	\$53,271 4

## WALKS AND CURBING ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$14,000 00	
From contingent account transferred, . . . . .	3,000 00	
From maintenance account transferred, . . . . .	500 00	
From macadam and gravel account transferred, . . . . .	950 00	
From paving account transferred, . . . . .	1,150 00	
From abutters for walks laid, . . . . .	19,609 88	
	<hr/>	\$39,209 88

## EXPENDITURES.

General expense, . . . . .	\$69 60	
Services of City Engineer's assistants, . . . . .	635 79	
Setting and resetting curbing not chargeable to abutters, . . . . .	8,757 24	
Work and material not chargeable to abutters, . . . . .	1,946 80	
Work and material chargeable to abutters, . . . . .	23,397 16	
Crosswalks, . . . . .	3,595 14	
Material, . . . . .	692 54	
	<u>\$39,094 27</u>	
Amount unexpended, . . . . .	115 61	\$39,209 88

## STREET WATERING ACCOUNT.

## RECEIPTS.

From appropriation, . . . . .	\$11,300 00	
From abutters, . . . . .	15,104 69	
From Street Railway Company, . . . . .	1,973 08	
	<u>\$28,377 77</u>	

## EXPENDITURES.

Equipment, . . . . .	\$5,241 56	
Repairs on carts and general expense, . . . . .	931 53	
For use of sprinkling cars as per contract, . . . . .	5,800 00	
For use of teams as per contract, . . . . .	13,675 60	
Inspection, . . . . .	800 21	
Repairing standpipes, . . . . .	651 47	
	<u>\$27,100 37</u>	
Amount unexpended, . . . . .	1,277 40	\$28,377 77

## . SUMMARIZED ACCOUNTS.

## RECEIPTS.

Maintenance, . . . . .	\$88,148 36
Macadam and gravel, . . . . .	57,651 79
Paving, . . . . .	53,271 41
Amount carried forward,	<u>\$199,071 56</u>

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Amount brought forward,	\$199,071 56
Walks and curbing, . . . . .	39,209 88
Street watering, . . . . .	28,377 77
Cherry lane relocation (special appropriation), . . . . .	1,904 24
Sumner avenue extension (special appropriation), . . . . .	7,435 00
Contingent account, steam rollers (special appropriation), . . . . .	5,600 00
	<hr/> \$281,598 45

## EXPENDITURES.

Maintenance, . . . . .	\$87,901 58
Macadam and gravel, . . . . .	57,414 18
Paving, . . . . .	53,197 76
Walks and curbing, . . . . .	39,094 27
Street watering, . . . . .	27,100 37
Cherry lane relocation (special appropriation), . . . . .	1,904 24
Sumner avenue extension (special appropriation), . . . . .	6,631 37
Contingent account, steam rollers (special appropriation), . . . . .	5,600 00
	<hr/> \$278,843 75

Property in the hands of the Superintendent of Streets and Sewers, December 10, 1901, amounts, as per inventory, to \$52,770.84.

## NEW STREETS.

The following streets have been accepted as public streets during the year:—

	Length.
Beaumont street, Belmont avenue to Dickinson street, .	695 feet
Beechwood avenue, Sumner to Spruceland avenue, . . .	501 "
Chase avenue, Fort Pleasant avenue to Riverview street, .	621 "
Cherryvale avenue, Long Hill street to Spruceland avenue,	651 "
Colonial avenue, State street to Wilbraham road, . . .	797 "
Crescent terrace, Fort Pleasant avenue to Maplewood terrace,	937 "

	Length.
Crystal avenue, Belmont avenue to Dickinson street, . . .	930 feet.
Eagle street, North Main to Chestnut street, . . .	568 "
Florentine gardens, Spruceland to Pineywoods avenue, . . .	570 "
Franklin street, Cass to Webster street, . . .	670 "
Merwin street, North Main to Chestnut street, . . .	700 "
Nelson avenue, King to Lebanon street, . . .	327 "
Park avenue, Sumner to Pineywoods avenue, . . .	800 "
Ridgewood place, Union to Mulberry street, . . .	537 "
Sheldon street, Birnie avenue to North Main street, . . .	652 "
Waltham avenue, Wilbraham road to Wilbraham avenue, . .	1,012 "
Warner place, Long Hill street to Fort Pleasant avenue, . .	691 "
Wolcott street, Liberty to Armory street, . . .	439 "
	<hr/> 12,098 feet.

The following streets have been relocated during the year:—

Belmont avenue, widened from 49.5 feet to 69.5 feet, from Daytona avenue to White street, about 2,470 feet.

Cherry lane, widened to 33 feet from Central to Mill street, about 1,450 feet.

Long Hill street, relocation of westerly line, Cherryvale avenue to easterly line of Leary estate.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

BOARD OF ALDERMEN, December 30, 1901.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk*.

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COMMON COUNCIL, December 30, 1901.

Read and concurred.

H. S. GILBERT, *Clerk*.

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Presented to the Mayor for approval, December 31, 1901.

E. A. NEWELL, *City Clerk*.

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1901.

Approved.

WILLIAM P. HAYES, *Mayor*.

TABLE OF MACADAMIZED STREETS.

NAME OF STREETS	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Acushnet avenue, . . . .	1,088	3,385	
Adams street, . . . .	1,003	3,193	133
Alden street, . . . .	2,776	*9,306	
Allen street, . . . .	2,253	*7,599	336
Allendale street, . . . .	663	2,094	
Arbor street, . . . .	437	1,222	
Armory street, . . . .	793	3,240	
Ashley street, . . . .	1,378	4,592	
††Avon place, . . . .	711	2,857	67
Bancroft street, . . . .	1,435	4,865	
Barnes street, . . . .	180	561	
Bay street, . . . .	4,053	12,960	
Belmont avenue, . . . .	1,576	4,510	45
Bliss street, . . . .	958	2,418	635
Bond street . . . .	1,629	5,112	
Boylston street, . . . .	1,807	864	
Bradford street, . . . .	862	2,921	14
Bridge street, . . . .	1,310	3,566	1,189
Broad street, . . . .	959	3,177	
Brookline avenue, . . . .	615	2,050	
Butler street, . . . .	1,525	2,223	662
Byers street, . . . .	480	1,088	105
Carew street, . . . .	2,618	5,373	2,299.
Cass street, . . . .	1,762	5,407	
Catharine street, . . . .	150	493	
Cedar street, . . . .	1,962	6,613	42
Central street, . . . .	4,903	10,357	2,475
Charles street, . . . .	618	1,888	
Chestnut street, . . . .	3,889	8,156	1,509
Church street, . . . .	832	2,553	
City Hall passageways, . . . .	557	1,004	16
Clarendon street, . . . .	204	674	
Clinton street, . . . .	703	1,842	
Congress street, . . . .	1,550	3,753	165
Court street, . . . .	689	1,492	560



NAME OF STREETS.	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Cross street, . . . . .	608	912	504
Cypress street, . . . . .	651	1,746	105
Dale street, . . . . .	812	1,973	78
Dartmouth street, . . . . .	1,132	5,159	
†Eagle street, . . . . .	556	1,855	
East Court street, . . . . .	369	608	247
Eastern avenue, . . . . .	4,516	*15,297	
Elliott street, . . . . .	1,007	2,681	661
Elm street, . . . . .	220	333	
Elmwood street, . . . . .	886	2,738	
Emery street, . . . . .	648	1,541	565
Essex street, . . . . .	1,606	5,143	
Everett street, . . . . .	1,500	4,056	803
Federal street, . . . . .	353	1,370	
Ferry street, . . . . .	1,357	2,270	1,171
Fisk avenue, . . . . .	1,126	5,005	
Florence street, . . . . .	1,582	5,273	
Fort Pleasant avenue, . . . . .	2,794	9,230	903
Franklin street, . . . . .	1,863	5,265	1,221
Fremont street, . . . . .	778	2,593	
Fulton street, . . . . .	3,569	10,986	107
Gardner street, . . . . .	1,114	3,713	
George street, . . . . .	110	609	33
Greenwood street, . . . . .	1,561	5,025	
Hampden street, . . . . .	607	1,866	535
Hancock street, . . . . .	3,104	*10,530	
Hillman street, . . . . .	647	1,582	219
Howard street, . . . . .	1,277	3,627	699
Hubbard avenue, . . . . .	568	1,063	
Jefferson avenue, . . . . .	1,275	6,375	
King street, . . . . .	2,286	*7,492	
Lebanon street, . . . . .	1,926	5,233	
Liberty street, . . . . .	1,008	2,368	618
Linden street, . . . . .	1,287	4,099	1,049
Locust street, . . . . .	793	1,887	614
Lombard street, . . . . .	590	1,677	
Loring street, . . . . .	707	2,294	
Lyman street, . . . . .	734	2,487	57
Madison avenue, . . . . .	529	1,358	239

NAME OF STREETS.	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Magazine street, . . . . .	734	2,434	
Main street, . . . . .	980	4,861	1,003
Main street, I. O., . . . . .	559	2,022	368
Maple street, . . . . .	3,721	8,488	1,570
Marble street, . . . . .	1,074	3,508	
Margaret street, . . . . .	842	2,807	
Market street, . . . . .	961	1,376	416
Mattoon street, . . . . .	524	1,425	350
†Merwin street, . . . . .	713	2,377	
Mill street, . . . . .	1,574	5,827	1,031
Morgan street, . . . . .	852	2,911	
Morris street, . . . . .	1,022	3,031	
Mulberry street, . . . . .	991	2,619	637
North street, . . . . .	2,988	10,807	
North Main street, . . . . .	7,115	22,228	2,840
Norwood street, . . . . .	1,117	2,911	
Oak street, . . . . .	1,344	4,069	67
Oak street, I. O., . . . . .	1,097	3,588	463
Olive street, . . . . .	478	1,248	
Osgood street, . . . . .	890	2,948	
Palmer avenue, . . . . .	991	3,177	
Park street, . . . . .	865	2,066	479
Patton street, . . . . .	1,631	5,294	144
Pearl street, . . . . .	1,220	2,699	814
Pendleton avenue, . . . . .	2,582	6,375	170
Pine street, . . . . .	4,420	13,813	531
Plainfield street, . . . . .	2,206	7,977	641
Pynchon street, . . . . .	868	2,148	662
Rutledge avenue, . . . . .	516	1,599	
Salem street, . . . . .	522	1,078	348
Sanford street, . . . . .	367	990	288
Sargeant street, . . . . .	860	3,126	
School street, . . . . .	1,415	4,535	62
Seventh street, . . . . .	822	2,529	
Sharon street, . . . . .	1,200	3,895	
Sherman street, . . . . .	1,528	5,078	
South street, . . . . .	1,863	6,503	375
Spring street, . . . . .	2,373	5,986	1,336
State street, . . . . .	11,601	*53,344	3,695

NAME OF STREETS.	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Stearns Park avenue, . . . .	259	461	
St. James avenue, . . . .	5,440	15,434	
Stockbridge street, . . . .	635	1,269	348
Summer street, . . . .	567	1,134	378
Sumner avenue, . . . .	3,215	15,227	
Taylor street, . . . .	1,183	2,844	1,046
Temple street, . . . .	953	2,570	
Tenth street, . . . .	1,577	4,324	127
Thompson street, . . . .	756	2,478	
Towneley avenue, . . . .	138	153	61
Union street, . . . .	6,088	19,425	453
Vernon street, . . . .	823	1,407	545
Vine street, . . . .	745	1,892	
Vinton street, . . . .	612	2,038	427
Walnut street, . . . .	3,142	*5,450	1,115
Warriner avenue, . . . .	450	1,601	
Water street, . . . .	5,145	13,546	2,979
Waverly street, . . . .	450	1,577	
West street, . . . .	1,195	3,872	
White street, . . . .	190	*619	84
Wilbraham road, . . . .	1,606	7,741	
Wilcox street, . . . .	922	3,016	
William street, . . . .	1,368	4,359	
Willow street, . . . .	895	1,862	631
Worthington street, . . . .	4,503	*6,498	1,296
York street, . . . .	1,000	2,997	
Total, . . . .	208,267	630,221	48,532

\* Includes macadam laid by Street Railway Company.

† Streets already macadamized and accepted as public streets in 1901.

†† 67 linear feet and 319 square yards owned by private party.

## TABLE OF PAVED STREETS.

	Lengths in feet.	Areas in sq. yds.
Belmont avenue, 400 feet east from Woodside avenue to Hall street, Catskill paving blocks (1901), . . . . .	1,862	1,211
Bridge street, Main to Dwight, rock asphalt (1900), . . . . .	688	2,525
Catharine street, State to Bay, Syracuse brick (1900), . . . . .	1,722	5,691
Chestnut street, northerly from Lyman street, granite blocks (1889), . . . . .	256	1,471
Chestnut street, north from B. & A. R. R. to Linden street, granite blocks (1892), . . . . .	1,640	5,235
Chestnut street, north from Linden to Carew, granite blocks (1893), . . . . .	773	2,156
Chestnut street, Carew to Allendale, Syracuse brick (1900), . . . . .	1,015	3,482
Chestnut street, Lyman to Worthington, granite blocks (1895), . . . . .	472	1,673
Court street, westerly from Main street, rock asphalt (1897), . . . . .	317	1,277
Court street, easterly from Court Square avenue, Syra- cuse brick (1897), . . . . .		174
Court Square avenue, Court to Elm, rock asphalt (1897), . . . . .	193	503
Court Square avenue, Court to Elm, Syracuse brick (1897), . . . . .		330
Dwight street, State to Lyman, Syracuse brick (1896), . . . . .	2,324	9,905
East Court street, Main to Market, rock asphalt (1900), . . . . .	117	297
Elm street, westerly from Main street, rock asphalt (1897), . . . . .	343	949
Elm street, Main street to Court Square avenue, Syra- cuse brick (1897), . . . . .		330
Fort street, Main to Water, granite blocks (1895), . . . . .	670	1,770
Harrison avenue, Main street to Dwight, Trinidad asphalt (1896), . . . . .	586	2,247
Liberty street, Chestnut to Cass, Syracuse brick (1900), . . . . .	1,399	4,571
Liberty street, Cass to Heywood avenue, Syracuse brick (1901), . . . . .	1,147	3,971
Lyman street, Main to Chestnut, granite blocks (1889), . . . . .	1,305	4,599
Main street, north side, Elm to Court, granite blocks (1887), . . . . .		432
Main street, State to Bridge, granite blocks (1888), . . . . .	1,550	5,857

	Lengths in feet.	Areas in sq. yds.
Main street, Bridge to Lyman, granite blocks (1889),	787	3,065
Main street, Lyman to Liberty, creosote wood block paving (1901), . . . . .	484	2,780
Main street, Liberty to Cypress, granite blocks (1890),	327	1,399
Main street, State street junction, granite blocks (1890),	80	250
Main street, Lyman to State between R. R. tracks, granite blocks (1890), . . . . .		1,078
Main street, Cypress to Emery, granite blocks (1891),	650	3,381
Main street, east side, from end of granite block paving to Carew, Syracuse brick (1897), . . . . .	1,302	4,605
Main street, west side, Emery to Sargeant, Catskill paving blocks (1901), . . . . .	1,447	5,449
Main street, State to Bliss, Syracuse brick (1893), . . . . .	285	1,315
Main street, Bliss to William, granite blocks (1893), . . . . .	1,148	5,475
Main street, William to Marble, Syracuse brick (1896),	1,762	8,307
Main street, Marble to Locust, Syracuse brick (1897),	840	4,381
Sanford street, Main to Market, rock asphalt (1900),	102	207
State street, Main to Library, granite blocks (1890),	1,019	4,034
State street, Dwight to Chestnut, widened, granite blocks (1896), . . . . .		217
State street, Federal to Oak, Syracuse brick (1897), . . . . .	847	4,590
Summer street, Autumn to Kibbe avenue, granite blocks (1895), . . . . .	1,259	4,029
Summer street, Kibbe ave. to 85 feet west of Federal street, granite blocks (1901), . . . . .	787	2,635
Walnut street, State to Union, Syracuse brick (1899),	638	2,144
Walnut street, Union to Pendleton avenue, Syracuse brick (1900), . . . . .	873	3,140
Worthington street, Main to Dwight, Syracuse brick (1896), . . . . .	739	2,544
Worthington street, Dwight to Fairbanks ave., Syracuse brick (1901), . . . . .	1,060	3,869
Total, . . . . .	34,265	129,500

# THIRTY-THIRD ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1901.

*To the Mayor and Board of Aldermen:—*

I have the honor to present statements of the receipts and expenditures of the Sewer Department, also descriptions of work completed and begun during the year ending December the 10th, 1901.

The expenditures under regular and special appropriations are as follows:—

Sewers and drains (regular appropriation), . . . .	\$61,505 00
Belmont avenue (special appropriation), . . . .	8,000 00
Carew street (special appropriation), . . . .	1,075 57
Dickinson street (special appropriation), . . . .	6,661 50
Forest avenue (special appropriation), . . . .	8,000 00
Mill river valley (special appropriation), . . . .	16,769 36
Springfield street and Glenwood (special appropriation), . .	214 09
Total, . . . . .	\$102,225 52

The various classifications of work, together with their respective quantities, are as follows:—

237 feet of 8" vitrified clay pipe, . . . .	new construction.
2,482 feet of 10" " " " . . . .	new construction.
678 feet of 10" " " " . . . .	reconstruction.
756 feet of 12" " " " . . . .	new construction.
2,459 feet of 12" " " " . . . .	reconstruction.
634 feet of 15" " " " . . . .	new construction.
2,860 feet of 15" " " " . . . .	reconstruction.
672 feet of 18" " " " . . . .	new construction.

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1,725 feet of 18" vitrified clay pipe,	.	.	.	reconstruction.
290 feet of 20" " " "	.	.	.	new construction.
1,102 feet of 20" " " "	.	.	.	reconstruction.
381 feet of 24" " " "	.	.	.	new construction.
74 feet of 24" " " "	.	.	.	reconstruction.
830 feet of 3'- 4" x 5'-0" brick sewer,	.	.	.	new construction.
819 feet of 3'- 4" x 4'-6" " "	.	.	.	new construction.
935 feet of 2'- 2" x 3'-0" " "	.	.	.	new construction.
1,379 feet of 2'- 6" x 3'-9" " "	.	.	.	new construction.
324 feet of 2'- 4" x 3'-6" " "	.	.	.	new construction.
434 feet of 2'- 0" x 3'-0" " "	.	.	.	new construction.
382 feet of 2'- 0" x 3'-0" " "	.	.	.	new construction.
312 feet of 1'-10" x 2'-9" " "	.	.	.	new construction.
702 feet of 2'- 2" x 2'-3" " "	.	.	.	new construction.
2,219 feet of 2'- 8" x 4'-0" " "	.	.	.	new construction.

The construction of brick sewers by department employees instead of by contract, which was begun in 1900, has been continued the past year, and I take pleasure in announcing that the cost of building Sumner avenue, Belmont avenue and Forest avenue trunk sewers has been \$3,242.49 less than the engineer's estimate of cost of constructing the same.

The construction of about 850 feet of the Mill river valley sewer has been awarded to Seymour & Newell of Springfield, the lowest bidders.

For itemized descriptions and costs of the above sewer construction, you are referred to another part of this report.

It gives me pleasure to express thanks to Mr. Michael Roane, Assistant Superintendent of Streets and Sewers, who has had general oversight over sewer work, for his valuable assistance, and to Aldermen Fitch, Bennett and Marsh, members of Committee on Sewers and Drains, for the many courtesies they have extended during the year.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

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BOARD OF ALDERMEN, December 30, 1901.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 30, 1901.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 31, 1901.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1901.

Approved.

WILLIAM P. HAYES, *Mayor.*



## NEW SEWER CONSTRUCTION.—1901.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Adams st., Town brook to Main st., relaying .....	Clay	86	18"	\$159 51
Alden st., easterly from Wilbraham ave .....	Clay	499	10"	250 86
Alderman st., easterly from Dickin- son st. ....	Clay	296 304 300 137	18" 15" 12" 10"	916 78
Allen ave., easterly from Allen st. ....	Clay	338	10"	
Bay st., Catharine to Clarendon, re- laying .....	Clay	194	10"	300 66
Bay st., Florida to Westminster, re- laying .....	Clay	304 377	20" 18"	1,092 89
Belmont ave., southerly from Sumner ave .....	Brick	830 819	3'-4" x 5'-0" 3'-0" x 4'-6" elliptical	
Belmont ave., flush gate .....	....	....	....	35 21
Carew st., Garden brook to Prospect st. ....	Brick	....	....	1,075 57
Cass st., northerly from Linden, re- laying .....	Clay	224	12"	....
Cass st., southerly from Linden, re- laying .....	Clay	546	15"	736 92
Cherrellyn ave. ....	Clay	....	....	106 66
Chestnut st., I. O., at Worcester st. .	Clay	30	15"	55 26
Clinton st., back water gate for park.	....	....	....	89 08
Colton st., catch basin .....	....	....	....	13 72
Cornell st., Dartmouth terrace to Wellesley st., relaying .....	Clay	185 374	15" 12"	543 05
Dartmouth terrace, Worthington st. to Cornell st., relaying .....	Clay	499 357 177	20" 18" 15"	
Dickinson st. ....	Brick	....	....	6,661 50
Emery st., flush gate .....	....	....	....	43 32
Essex st., I. O., extension to Myrtle st. ....	Clay	281	10"	210 00

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Fairfield st., flush gate.....		....	....	\$27 20
Federal st., flush gate .....		....	....	14 28
Florida st., southerly from St. James ave., relaying.....	Brick	935	2'-2" x 3'-3" } egg shaped	4,499 10
Florida st., southerly from St. James ave., relaying.....	Clay	74	24"	257 32
Franklin st., flush gate .....		....	....	21 53
Forest ave., southerly from Sumner ave.....	Brick	1,379 324 434 312	2'-6" x 3'-9" } 2'-4" x 3'-6" } 2'-0" x 3'-0" } 1'-10" x 2'-9" } egg shaped	8,727 02
Hall st., flush gate .....		....	....	15 02
Harvard st., manhole.....		....	....	25 66
Hillman st., Main to Dwight, relaying	Clay	350 344	15" } 12" }	1,410 02
Jefferson ave., Main to North, relay- ing .....	Clay	299 299 276 60	20" } 18" } 15" } 12" }	1,663 86
Liberty st., extension from Phoenix ave.....	Clay	376	18"	623 46
Logan st., northerly from Granville st.	Clay	200	10"	147 48
Lowell st., dike to Plainfield st., re- laying .....	Clay	305 396 396 283	18" } 15" } 12" } 10" }	986 21
Massachusetts ave., southerly from Wilbraham road .....	Clay	300 300 227	15" } 12" } 10" }	953 68
Massasoit st., north from Montmo- renci st.....	Clay	152	10"	92 94
Merrick ave., manhole and flush gate		....	....	48 50
Mill River Valley sewer .....	Brick	702	2'-2" x 3'-3" } elliptical	16,769 36
Mill River Valley, storm overflow ...		....	....	295 78
Myrtle st., northerly from brook ....	Clay	107 237	10" } 8" }	69 76
Myrtle st., I. O., Main to Worcester..	Clay	377	24"	1,003 44

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Plainfield st. ....		....	....	\$74 85
Pasadena ave., southerly from White st. ....	Clay	156 291	12" } 10" }	258 61
Pasco st., I. O., extension southerly.	Clay	250	10" }	201 44
Sherman st., State to McKnight st., relaying .....	Clay	301 301 544	18" } 15" } 12" }	1,314 14
Spring st., Worthington to Summer, and Summer st. north from Spring .....	Brick	....	....	1,236 18
Springfield st. and Glenwood .....				266 75
Sumner ave., Dickinson to White...	Brick	2,219	2'-8" x 4'-0" } elliptical }	11,483 12
Walnut st., flush gate .....		....	....	23 83
Washington ave., catch basin .....		....	....	9 24
Westminster st., Bay to State, relay- ing .....	Clay	300 300 201	15" } 12" } 10" }	705 11
Wilbraham road, manhole .....		....	....	42 65
Worcester st., I. O., west from Myrtle st. ....	Brick	382	2'-0" x 3'-0" } egg shaped }	1,283 00
Worcester st., I. O., west from Myrtle st. ....	Clay	4 290	24" } 20" }	945 80
Worthington st., east from west brook, relaying .....	Clay	329 217	15" } 12" }	1,110 54
		22,686		\$79,395 90

## NEW SEWER CONSTRUCTION.—CONTINUED.

## SEWERS ABANDONED—1901.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Adams st., Town brook to Main st. . .	Cem.	86	18"	\$225 18
Bay st., Florida to Westminster st. . .	Cem.	679	15"	768 15
Chestnut st., I. O., at Worcester st. .	Cem.	86	15"	85 56
Cornell st., Dartmouth terrace to Wellesley st. . . . .	Cem.	374	12"	.....
Dartmouth terrace, Worthington to Harvard st. . . . .	Cem.	560	12"	348 62
Dartmouth terrace, Worthington to Harvard st. . . . .	Clay	478	12"	239 08
Florida st., Worthington to Bay st. .	Cem.	937	18"	2,884 76
		601	15"	
		548	24"	
Hickory st., including 229' in Mill st.	Clay	367	12"	1,118 25
Hillman st., Main to Dwight . . . . .	Cem.	695	12"	950 89
Jefferson ave., North Main to North.	Cem.	717	15"	1,112 37
		218	12"	
Lowell st. . . . .	Cem.	1,380	12"	262 00
Sherman st., state to McKnight. . . .	Cem.	1,138	12"	794 04
Sumner ave., Dickinson st. to Sor- rento ave. . . . .	Clay	609	8"	228 29
Westminster st., south from Bay st. .	Cem.	800	12"	840 69
Worthington st., near Autumn. . . . .	Cem.	134	12"	140 85
Worthington st., near Sacketts ave. .	Cem.	348	15"	267 52
		10,755		\$10,266 25

SUMMARY.	Length in Feet.	Size.	Cost.
Brick sewers built by regular appropriation. . . .	3,776		\$19,867 65
Brick sewers built by special appropriation. . . .	4,560		40,720 52
Clay pipe sewers built by regular appropriation. .	14,350		18,487 57
Flush gates, manholes, catch basins, built by regular appropriation. . . . .	.....		320 16
	22,686		79,395 90
Sewers abandoned. . . . .	10,755		10,266 25
Net addition carried to sewer table. . . . .	11,931		\$69,129 65

## CLEANING AND REPAIRS.

Sewers for which less than \$10.00 was expended are included in "Sundry Sewers."

Birnie avenue, . . . . .	\$40 96
Card Factory pond, . . . . .	21 62
Carew street, . . . . .	34 81
Cass street, . . . . .	131 44
Catch basins, cleaning, . . . . .	545 16
Chestnut street, . . . . .	45 69
Congress street, . . . . .	27 12
East Court street, . . . . .	16 31
Ferry street, . . . . .	94 62
Fort Pleasant avenue, . . . . .	30 55
Garden brook, . . . . .	1,052 17
Hancock street, . . . . .	138 08
Jefferson avenue, . . . . .	24 79
Laurel avenue, . . . . .	215 54
Liberty street, . . . . .	178 31
Locust street, . . . . .	457 39
Long Hill street, . . . . .	14 75
Lowell street, . . . . .	300 13
Main street, . . . . .	671 01
Nursery street, . . . . .	55 21
Park avenue, . . . . .	16 65
Pine street, . . . . .	392 73
South Main street, . . . . .	14 25
State street, . . . . .	64 67
Sundry sewers, cleaning connections, . . . . .	205 11
Sundry sewers, flushing, . . . . .	1,377 23
Sundry sewers, repairs, . . . . .	349 48
Taylor avenue, . . . . .	12 49
Town brook, . . . . .	30 78
Union street, . . . . .	66 75
Worthington street, . . . . .	600 81
York street, . . . . .	60 75

**\$7,287 31**

## RECEIPTS.

## REGULAR APPROPRIATION.

From appropriation, . . . . .	\$30,000 00
From entrance fees, . . . . .	9,304 97
From other departments and private parties, . . . . .	5,584 68
From Dickinson street sewer, transferred, . . . . .	4,200 00
From Springfield street sewer, transferred, . . . . .	3,247 79
From Mill river sewer, transferred, . . . . .	7,300 00
From contingent account, transferred, . . . . .	1,400 00
From premium on sewer bonds, . . . . .	562 50
	<hr/>
	\$61,599 94
Balance unexpended, . . . . .	94 94
	<hr/>
	\$61,505 00

## EXPENDITURES.

## REGULAR APPROPRIATION.

Building and connecting private drains, . . . . .	\$2,839 60
City teams, . . . . .	1,245 49
Cleaning and repairs, . . . . .	5,910 08
Department and general expenses, . . . . .	2,554 36
Flushing sewers, . . . . .	1,377 23
Material, . . . . .	1,174 52
Services of City Engineer's assistants, . . . . .	880 12
Sewer construction, . . . . .	38,675 38
Supplies, . . . . .	113 96
Tools, . . . . .	896 61
Work and material for other departments, . . . . .	5,168 13
Work and material for private parties, . . . . .	669 52
	<hr/>
	\$61,505 00

## EXPENDITURES.

## SPECIAL APPROPRIATIONS.

	Limit of Expenditure.	Expended prior to this year.	Expended since Dec. 10, 1900.	Balance Unexpended.
Belmont avenue,	\$8,000 00		\$8,000 00	
Carew street,	21,806 48	\$20,780 91	1,075 57	
Dickinson street,	44,552 01	35,702 47	6,661 50	\$2,188 14
Forest avenue,	8,000 00		8,000 00	
Mill river valley,	52,300 00	31,704 78	16,769 86	3,825 91
Springfield street sewer,	18,452 21	18,288 12	214 09	

# CITY OF SPRINGFIELD,

SEWER CONSTRUCTION TO DECEMBER 10, 1901.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., west from Fisk ave	301	15"	Clay	\$497.88
	275	12"	" }	
Acushnet ave., east from Main	294	20"	"	398.94
st .....	279	18"	"	
	271	15"	"	
	26	12"	" }	
Adams st., Town brook to Main	149	18"	"	\$322.22
st .....	890		Brick	66.68
east from Town brook....				388.90
Alden st., Hancock to East-	595	18"	Cem. }	1,529.54
ern ave.....	820	15"	" }	
Eastern ave., to Wilbraham	895	15"	Clay	911.39
ave.....				250.86
easterly from Wilbraham	499	10"	"	
ave .....				2,691.79
Alderman st., easterly from	296	18"	"	916.78
Dickinson st.....	304	15"	"	
	300	12"	"	
	187	10"	"	
Alexanderst., east from North st.	288	10"	"	188.48
Alfred st., east from Birnie ave.	377	10"	"	.....
Allenave., easterly from Allen st	338	10"	"	205.36
Allen st., Mill river to Randall	902	24"	"	2,408.92
ave.....	383	18"	"	1,598.59
	474	15"	"	
	580	12"	"	
	1,603	12"	"	
extension easterly.....				881.58
Allendale st., east from North st.	272	12"	"	4,889.09
	340	10"	" }	401.43
	466	12"	" }	
Amherst st., north from Harvard	512	12"	Cem.	74.90
Princeton to Monmouth....	191	10"	Clay	622.90
Andrew st., north from Boston			" }	697.80
road .....	463	20"	"	
	423	18"	"	
	382	12"	" }	1,753.67



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Arbor st., Butler to Carew....	398	12"	Clay	\$318.06
Armory Hill sewer from Armory st., through private grounds to Worthington..	150 900 249	2'-5"x3'-7½" 2'-8"x4'-0" 2'-1"x3'-1½"	Brick " } "	5,318.04
Armory st., north from Liberty ..	450 476	1'-10"x2'-9" 1'-8"x2'-6"	" } "	\$2,439.42
north from brick sewer to Carew st.....	156 267 290	24" 20" 12"	Clay } " } "	975.77
north from culvert north of B. & A. R. R.....	690 360 271	15" 12" 10"	" } " } "	1,165.47
south from Summer.....	374	12"	"	384.78
south from Worthington....	570	15"	Cem.	658.06
Ashley st.....	65 580 697	18" 15" 12"	" } " } "	80.45 1,453.92
Auburn st.....	397 335	12" 10"	Clay } "	1,534.37 655.06
Bancroft st., Garden brook to Chestnut st.....	1361	3'-4"x5'-0"	Brick	
including Chestnut st., Bancroft to Montmorenci..	379	3'-2"x4'-9"	"	8,914.04
Montmorenci st., east from Chestnut.....	43	3'-2"x4'-9"	"	
Bay st., Bowles to Cambridge	1,037 360	2'-8"x4'-0" 2'-2"x3'-3"	" } "	8,056.62
east from Cambridge.....	247	8"	Clay	46.75
Sherman to Clarendon.....	151	8"	Cem.	46.82
Florida to Sherman .....	304 377	20" 18"	Clay } "	1,092.89
	812	15"	"	945.16
Florida to Pleasant .....	234	12"	Cem.	334.00
St James ave. to Pleasant..	250 245 228	15" 12" 10"	Clay } " } "	715.01
Catharine to Clarendon ....	194	10"	"	200.66
Beacon st., Eastern ave. to Colton st .....	250	10"	"	119.21
east from Colton.....	124	8"	"	8.65
				122.86

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Beaumont st., north from Belmont ave.....	250	12"	Clay	\$403.87
	431	10"	"	
Beech st., north from Central.....	410	10"	Cem.	74.20
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade pl., west fr. Walnut st.	220	8"	"	.....
	140	6"	"	
Bellevue ave., easterly from Belmont ave.....	300	18"	"	.....
	300	15"	"	
	194	12"	"	
westerly from Dickinson st.	744	10"	"	.....
Belmont ave., Mill river to brick sewer, .....	954	20"	"	\$4,150.20
east from end of brick sewer to Kenwood Park.....	432	20"	"	
	493	18"	"	
extension to Sumner ave...	301	15"	"	
	403	12"	"	842.40
	616	10"	"	8,179.57
southerly from Sumner ave..	830	3'-4"x5'-0"	Brick	
	819	3'-0"x4'-6"	"	
east from Fort Pleasant ave. from top of hill to just east of Litchfield st.....	90	10"	Clay	93.92
	660	2'-0"x3'-0"	Brick	11,750.19
	445	1'-10"x2'-9"	"	
	595	1'-8"x2'-6"	"	
	550	1'-6"x2'-3"	"	
Belmont court .....	216	10"	Clay	25,016.28
Beaton st., south from State..	301	12"	"	146.76
	300	10"	"	513.96
	247	8"	"	
Berkeley st., Princeton to Monmouth .....	483	12"	"	517.22
Berkshire st., I. O., Oak to Myrtle .....	701	12"	Cem.	946.21
east from Chestnut.....	577	12"	Clay	545.74
				1,491.96
Beuse place, west from Main st.	290	10"	"	.....
Burale ave., north from Worcester st., sewer extension to Grace st.....	162	15"	Cem.	...
south from Worcester st., sewer extension to Walter st .....	144	12"	"	.....
north from Wason ave....	362	24"	Clay	579.11

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Birnie ave., south from Wason av	350	18"	Clay	\$1,024.75
	417	15"	"	
north from Arch st. ....	1,048	24"	"	
north from Douglas st. ....	292	24"	"	....
	303	20"	"	1,149.93
	304	15"	"	
	144	10"	"	
Bliss st., from Main to N. Y., N. H. & H. R. R. ....	1,284	12"	Cem.	\$3,753.79
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) ....	203	12	"	1,150.71
Bond st., east from Garden brook sewer .....	341	2' 0" x 3' 0"	Brick	....
end of brick sewer to Chest- nut st. ....	959	24"	Clay	1,580.25
				2,195.84
				3,776.00
Bowdoin st., south from Wor- thington .....	673	15"	Cem.	740.00
Worthington to Ingersoll grove	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight	752	15"	"	1,058.67
east and north from Catharine	250	12"	Clay	50.82
	275	8"	"	
				1,109.49
Boylston st. ....	610	18"	Cem.	1,638.73
	346	15"	"	
Brace st., north from Belmont ave .....	137	10"	Clay	....
Bradford st .....	352	15"	Cem.	1,301.90
	758	12"	"	
Bridge st., west of Main .....	798	12"	"	718.79
	275	15"	Clay	429.14
Main to Chestnut .....	1,158	2' 0" x 3' 0"	Brick	5,414.20
				6,562.13
Broad st. ....	970	15"	Cem.	1,240.75
Brookline ave., east from North st. ....	328	12"	Clay	29.57
	171	10"	"	
Brown st., Yale to Bay .....	483	10"	Cem.	357.05
	21	8"	"	
Buckingham place, east from Buckingham st. ....	235	10"	Clay	150.05
Buckingham st., Bay to Claren- don .....	650	12"	Cem.	504.36
south from Bay .....	35	12"	"	
State to Bay .....	305	18"	Clay	1,158.40
	345	15"	"	
	675	12"	"	1,643.75

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Burr st., east from Andrew....	570	12"	Clay	\$417.83
Butler st., Chestnut to Cass..	1,268	20"	"	\$2,021.96
easterly from Cass.....	321	20"	"	520.71
				2,542.67
Calhoun st., North Main to North .....	853	12"	"	631.40
east from North.....	300	8"	"	227.19
				858.59
Cambridge st., south from Bay	276	20"	"	1,100.88
	331	18"	"	
	266	15"	"	
	302	12"	"	
	278	10"	"	
				1,497.23
Card-factory pond .....	751	12"	Cem.	408.75
in front of new High school	492	24"	Clay	848.26
				1,257.01
Carew st.....	580	18"	Cem.	671.51
east from 18" pipe.....	200	12"	"	153.28
east from Garden brook to Prospect st .....	1,456	4'-3" cir.	Brick	21,806.48
	1,257	3'-0" cir.	"	
	791	2'-8" cir.	"	
				22,631.27
Cass st., south from Linden..	596	15"	Clay	892.07
north from Linden .....	224	12"	"	
Liberty to Franklin.....	500	12"	"	
	152	10"	"	457.99
	11	8"	"	
				1,350.06
Catharine st., Dartmouth to McKnight.....	833	2'-0" x 3'-0"	Brick	4,428.92
State to McKnight .....	348	15"	Clay	1,348.95
	438	12"	"	
	333	10"	"	
				5,777.87
Cedar st., Pine to Walnut...	180	3'-10" x 5'-9"	Brick	889.35
	1,074	3'-8" x 5'-6"	"	6,206.73
west from Pine.....	378	12"	Cem.	288.32
				7,384.40
Cedar st., I. O., Main st. to river.....	433	2'-0" x 3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	198.76
				2,200.20
Central st., east from Main...	99	15"	Cem.	147.60
east from 15" pipe.....	546	12"	"	385.49
Main to Maple .....	527	2'-0" x 3'-0"	Brick	2,520.66
	700	1'-8" x 2'-6"	"	
	225	18"	Cem.	
Maple to top of Sterns Hill	480	1'-6"	Brick	559.00
	520	18"	Cem.	
west from Pine st.....	500	12"	"	481.38

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Central st., Pine to Mill river.	645	18"	Cem.	\$2,044.52
	866	15"	"	
	339	12"	"	
	335	12"	Clay	
	310	10"	"	
				514.05
				<b>\$6,652.70</b>
Central st. ave., Knox to Central st. ....	279	10"	Cem.	197.64
	285	12"	"	44.07
				<b>241.71</b>
Center st., I. O., Oak to Pine..	463	12'	"	<b>454.31</b>
Chapel st.....	400	10"	Clay	<b>308.13</b>
Chapin st., north from State..	349	15"	"	<b>746.99</b>
	359	12"	"	
Chase ave., east from Fort Pleasant ave.....	238	12"	"	.....
	333	10"	"	
Charles st., north from Liberty south from Liberty.....	654	12"	"	576.40
	29	12"	"	12.94
				<b>589.34</b>
Charter ave .....	527	12"	"	<b>475.30</b>
Cherrellyn ave.....	300	15"	"	<b>410.63</b>
Chester st., Hancock to Central	330	8"	"	....
Chestnut st., south from Edwards	575	12"	Cem.	579.02
south from Mattoon.....	288	15"	"	319.69
Mattoon to Pearl.....	313	16" x 24"	Brick	445.40
Pearl to Bridge.....	143	1'-8" x 2'-6"	"	599.51
Bridge to Worthington....	480	2'-0"	"	....
Worthington to Taylor....	60	18"	Cem.	291.17
	244	12"	"	
Lyman st. to B. & A. R. R..	134	18"	"	355.41
	72	12"	"	
south from Franklin.....	500	12"	"	358.75
north from Franklin.....	397	12"	"	294.14
Essex to Everett.....	374	15"	"	586.72
Carew to Prospect.....	424	24"	Clay	1,618.64
	537	20"	"	
north from Prospect.. ....	313	18"	Cem.	406.00
Bancroft to Montmorenci...	391	15"	"	535.24
south from Bancroft.....	299	12"	"	213.18
Ringgold to Prospect .....	220	12"	"	178.88
north from Montmorenci...	185	12"	"	252.23
	717	12"	Clay	807.01
north from Eagle st.....	87	15"	"	.....
south from Merwin st....	178	10"	"	
south from Eagle st.....	171	10"	"	
				<b>7,840.99</b>
For brick sewer see Bancroft st.				

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Chestnut st., I. O., Worcester to Hampden.....	342	15"	Cem.	\$340.25
	30	15"	Clay	55.26
Hampden to Berkshire. . .	307	15"	"	342.65
				<u>\$738.16</u>
Cherryvale ave., east and west from Long Hill st.....	596	10"	"	.....
Church st.....	556	18"	"	1,398.71
do .....	80	15"	Cem.	157.23
				<u>1,555.94</u>
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	84.12
	55	8"	"	6.89
				<u>91.01</u>
Clarendon st., Worthington to St. James ave.....	336	18"	Cem. }	1,678.74
St. James ave. to Sherman st .....	885	12"	" }	
west from Worthington....	205	10"	Clay	225.80
				<u>1,904.54</u>
Clayton ave.....	398	15"	" }	696.54
	253	12"	" }	
Cleveland st., east from Ar- mory .....	274	18"	" }	790.48
	250	15"	" }	
	276	12"	" }	
	284	10"	" }	
Clifford st., north from Bay..	250	12"	" }	319.95
	119	10"	" }	
Clifton ave., south from Central st .....	300	8"	" }	.....
	106	6"	" }	
Cliftwood ave., south from Sumner ave.....	464	10"	"	.....
Clinton st.....	410	12"	Cem.	441.52
Clinton st., Conn. river to Ful- ton st.....	593	7'-3" x 4'-10"	Brick }	26,137.87
including Fulton st. from Clinton to Sargeant.....	1,080	7'-0" x 4'-8"	" }	
	42	7'-3" x 4'-10"	" }	
Sargeant st.....	920	6'-9" x 4'-6"	" }	
Carew st., west from Garden brook .....	250	6'-9" x 4'-6"	"	2,131.45
connection with Garden brook .....	32	5'-0"	" }	
		24"	Wood }	
submerged outlet .....		24"	C. Ir'n }	
				<u>28,710.84</u>

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
College ave., State st. to Shattuck ave. ....	839	12"	Clay	\$139.62
north from Shattuck ave. ....	175	12"	"	....
College st., State st. to Wilbraham road .....	34	12"	"	\$139.62
ham road .....	443	10"	"	349.32
Collins st., east from Eastern ave. ....	300	12"	"	
	269	10"	"	457.04
Colonial ave., south from State. ....	326	12"	"	
	348	10"	"	....
Colton st., Wilbraham road to Beacon st. ....	448	18"	Clay	
	569	15"	"	1,864.26
	658	12"	"	
Columbia terrace, north and east from Liberty st. ....	498	10"	"	....
Columbus ave., north from Park ave. ....	307	10"	"	....
Congress st. ....	1,255	15"	Cem.	
	221	12"	"	1,733.14
	76	10"	"	
Continental ave., south from Sumner ave. ....	215	12"	Clay	
	202	10"	"	27.45
Cook's ave., Worthington st. to N. Church ave. ....	117	15"	Cem.	
south from N. Church ave (includes cost of N. Church ave ) .....	69	10"	"	573.84
Cornell st., Dartmouth terrace to Wellesley st. ....	185	15"	Clay	
	374	12	"	543.05
westerly from Princeton. ....	52	10"	Cem.	47.30
	167	8"	Clay	170.95
easterly from Princeton. ....	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				1,011.55
Court st., east from Water. ....	273	12"	Cem.	226.15
west from City Hall. ....	431	12"	"	553.45
Main st. to City Hall .....	200	12"	"	309.67
				1,089.27
Courtland st., north from State. ....	164	15"	Clay	
	621	12"	"	672.61
Crescent terrace, easterly from Fort Pleasant ave. ....	298	15"	"	
	322	12"	"	....
	105	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

E OF SEWER.	Length in Feet.	Size.	Material.	Cost.
west from Walnut st.	321	10"	Clay	\$231.38
ast from Willow...	363	12"	Cem.	\$311.56
Willow .....	388	18"	Clay	878.12
., east from Belmont				1,189.68
.....	251	15"	"	24.07
.....	250	12"	"	
.....	298	10"	"	
., from Conn. river				
arden brook in Ferry	1,466	3'-4" x 5'-0"	Brick	13,629.35
ve.....	360	12"	Clay	484.08
north from sewer,				
from Hubbard ave.	203	10"	"	157.30
om Winthrop.....	46	8"	"	13.08
				170.38
st., St. James ave.				
ie st.....	973	3'-0" x 4'-6"	Brick	8,247.06
Bowles.....	295	2'-6" x 3'-9"	"	
terrace, Worthing-				
to Cornell.....	499	20"	Clay	2,213.06
.....	357	18"	"	
.....	177	15"	"	
south from Bay....	229	15"	"	165.40
.....	380	12"	"	
.....	518	10"	"	
ve., west from White.	350	10"	"	95.87
ve., west from Fisk				
.....	510	12"	"	608.57
n Plainfield st.....	403	12"	"	
, Knox to Pine....	558	12"	Cem.	60.83
	226	10"	Clay	245.10
st., Mill st. to Sum-				305.93
ve.....	35	4'-6" cir	Brick	42,363.97
.....	60	5'-0" x 2'-1"	"	
.....	251	5'-0" cir.	"	
.....	679	4'-0" cir.	"	
.....	460	4'-10" x 7'-3"	"	
.....	869	4'-8" x 7'-0"	"	
.....	1,040	4'-4" x 6'-6"	"	
.....	996	4'-2" x 6'-3"	"	
t., east from Birnie				
.....	315	10"	Clay	....
r st., St. James ave.				
nherst st.....	364	12"	"	359.50
.....	238	10"	"	
t. extension.				
ain to Chestnut ...	424	4'-6"	Brick	4,805.19
.....	442	4'-0"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Douglas st. (see Rowland ave.)	....	....	....	....
Dresden ave., south from State st .....	359 321	12" 10"	Clay " }	 \$25.14
Dwight st., north from Harrison ave.....	100	15"	Cem.	\$144.41
north from Worthington ..	342	12"	"	374.73
south from Worthington....	269	12"	Clay	
south from Hillman.....	226	10"	"	
north from Hillman .....	103	10"	"	2,520.71
north from Sanford.....	253 229 199	20" 18" 15"	" " "	
south from Sanford.....	258	2'-8"x4'-0"	Brick	1,571.86
Dymon st.....	415	12"	Cem.	4,611.71 385.98
Eagle st., North Main to Chest- nut .....	643	15"	Clay	....
East Court st, west from Dwight	5 202	12" 12"	Cem Clay	4.80 183.72
Eastern ave., north from Mon- roe st.....	29 128	12" 8"	Cem. Clay	51.50 90.66
south from Monroe st.....	28	12"	Cem.	45.09
north from Lebanon st...	210	12"	Clay	147.90
Lebanon to Olive st.....	194	12"	Cem.	331.17
south from Olive st .....	159	12"	"	190.96
Greene to Ladd.....	169	8"	Clay	119.57
south from Greene.....	38	15"	"	27.25
north from King st .....	125	8"	"	69.58
north from Pendleton ave..	152	10"	Cem	166.50
north from Tyler st....	101	10"	Clay	149.70
north from Quincy st.....	312	12"	Cem.	190.38
Watershop pond to Man- hattan st.....	286 118	12" 10"	" "	181.30 131.15
Manhattan to Alden st.	1,164	24"	Clay	2,089.43
Alden to Collins st. ....	338 231	20" 12"	" "	636.21 313.99
East William st. (see William st)	....	12 "	Cem.	4,933.34
Edwards st .....	551	12"	"	404.88
Elliott st., into and through Salem and 290 feet in Salem .....	283 709 533	18" 15 " 12"	" " " }	 1,844.98

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Elm st., Conn. river to Water st .....	385	3'-9" x 3'-9"	Brick	\$29.70
Water st. to Main.....	996	3'-8" x 5'-6"	"	10,714.49
submerged outlet.....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
				<u>\$12,804.78</u>
Elmwood st., Main to Han- over.....	300	18"	Clay	707.66
	249	15"	"	
	50	12"	"	
Emery st.....	542	12"	Cem.	579.58
Essex st., west from Garden brook .....	418	15"	"	355.00
Garden brook to Chestnut..	1,115	2'-2" x 3'-3"	Brick	7,105.10
	204	18"	Cem	355.33
				<u>7,815.48</u>
Essex st., I. O., west from Oak	254	12"	Clay	424.89
	145	10"	"	
extension to Myrtle st....	281	10"	"	
				<u>634.98</u>
Everett st., Chestnut to brook	323	15"	"	308.39
west from Cass.. .....	926	15"	"	821.43
east from Cass .....	....	....	....	104.35
				<u>1,234.17</u>
Euclid ave., Belmont ave. to Dickinson st.....	389	12"	"	1,102.00
	741	10"	"	
north from Dickinson st....	77	8"	"	
				<u>1,152.67</u>
Fairfield st., west from Litch- field.....	380	12"	"	....
north and west from Gar- field... ..	556	10"	"	351.64
				<u>351.64</u>
Federal st., Worthington to Pearl .....	567	12"	C. m.	740.92
south from Summer.....	274	10"	Clay	172.00
				<u>912.92</u>
Ferry st., Main to Garden brook (see Cypress st.).....	....	....	....	....
Garden brook to Chestnut st	1,168	2'-4" x 3'-6"	Brick	5,377.81
				<u>5,377.81</u>
Firglade ave., Sumner to Spruceland .....	350	10"	Clay	46.01
	270	8"	"	
Spruceland to Pineywoods ave.....	447	10"	"	46.01
		8"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fisk ave., Rowland to Worcester .....	272	24"	Clay	\$1,073.11
	275	20"	"	
	298	10"	"	
south from Wason .....	299	24"	"	1,216.81
	294	20"	"	
	248	12"	"	
Florence st., east from Pine...	824	15"	Cem.	2,068.95
	651	12"	"	
east from Hancock .....	283	10"	"	
				2,372.10
Florentine Gardens, north from Pineywoods ave. ....	421	10"	Clay	....
Florida st., Worthington to St. James ave. ....	935	2'-2"x3'-3"	Brick	4,499.10
southerly from St. James ave Worthington to Ingersoll grove .....	74	24"	Clay	257.32
	273	15"	"	359.06
	561	12"	"	523.88
				5,639.36
Forest ave., south from Sum- ner ave. ....	1,379	2' 6"x3'-9"	Brick	8,727.02
	324	2'-4"x3'-6"	"	
	434	2'-0"x3'-0"	"	
	312	1'-10"x2'-9"	"	
Forest st., Belmont ave. to Park ave. ....	419	12"	Clay	651.33
	255	10"	"	
Fort st., Main to Water .....	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave. ....	888	2'-4"x3'-6"	Brick	13,293.38
	1,825	2'-0"x3'-0"	"	
south from Mill st. ....	428	12"	Clay	293.42
				13,586.80
Franklin st., west from Garden brook sewer .....	434	18"	Cem.	....
east from Garden brook sewer .....	469	18"	"	1,834.76
	735	15"	"	
Chestnut to Charles .....	273	15"	Clay	303.37
east from Charles .....	670	12"	"	471.99
west from Nursery .....	207	15"	"	91.55
east from Nursery .....	98	15"	"	
	566	15"	Cem.	....
				2,701.87
Fremont st., Main to Water..	780	....	Brick	702.45
west from Main .....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				1,424.25

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fulton st., Cypress to Clinton	882	12"	Cem.	\$826.66
north from Clinton.....	829	15"	"	1,138.56
north from John.....	314	12"	Clay	639.82
	401	10"	"	
				\$2,605.04
Gardner ave., north from Gard-				
ner st.....	151	8"	"	73.11
Gardner st .....	655	2'-0" x 3'-0"	Brick	1,995.23
	400	12"	Cem.	518.97
				2,514.20
Garden brook sewer, north				
from Liberty st. to C. R.				
R. R. ....	2,936	5'-6", cir.	Brick	47,577.34
	766	5'-0", cir.	"	
	1,303	4'-6", cir.	"	
	236	3'-0" x 4'-6"	"	
Worthington st., easterly to				
Armory st.....	3,274	4 6-10', cir.	"	29,761.32
	952	4'-1", cir.	"	
				77,338.66
Garfield st., east from Park ave	556	15"	Clay	967.16
	514	12"	"	
west from Belmont ave....	531	10"	"	329.87
				1,297.03
George st., south from Dexter	409	10"	"	332.45
Girard ave., Bay st. to Mc-				
Knight.....	947	12"	"	711.13
Grace st., east from Birnie ave	274	15"	Cem.	51.56
Grand ave., east from Reverest.	250	15"	Clay	....
	252	12"	"	
west from Revere st.....	151	10"	"	....
Grant st .....	588	12"	Cem	439.38
Granville st., Eastern ave. to				
Logan st.....	495	12"	"	519.02
Gray's ave.....	495	12"	"	421.06
Greene st., Hancock to East-				
ern ave.....	610	18"	"	1,754.35
	793	15"	"	
Greenleaf st., Sumner ave. to				
Garfield st .....	527	12"	Clay	133.60
Greenwood st., Main to Garden				
brook .....	386	12"	Cem.	2,231.69
east from Garden brook....	538	15"	Clay	
east from 15" pipe .....	113	12"	"	
	452	12"	Cem.	
Grosvenor st.....	131	18"	"	624.19
	648	15"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Grove st., west from North . .	679	10"	Clay	\$442.65
Grover st., east from Armory st.	300	18"	"	898.06
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dick- inson st. ....	500	12"	"	817.91
	474	10"	"	
Hampden st. ....	569	15"	Cem.	711.90
Hampden st., I. O. ....	459	12"	"	301.25
Hampshire st., I. O., east from Oak. ....	250	12"	"	\$206.30
west from Oak. ....	300	12"	Clay	633.59
	398	10"	"	
				839.79
Hancock ave., west from Han- cock st. ....	520	10"	"	531.80
Hancock st., Central to Walnut	218	18"	Cem.	1,759.06
	1,343	15"	"	
north from Walnut. ....	122	12"	"	88.00
Walnut (through Lebanon) to Quincy. ....	1,852	3'-6" x 5'-3"	Brick	21,668.02
Quincy to State. ....	913	3'-4" x 5'-0"	"	
Lebanon to Alden. ....	827	2'-0" x 3'-0"	"	5,009.61
Mill river to Central st. ....	920	12"	Clay	866.30
				29,390.99
				2,650.26
Hanover st. ....	830	2'-2" x 3'-3"	Brick	
Harriet st., east from North Main st. ....	250	15"	Clay	377.17
	207	12"	"	
east from North st. ....	330	10"	"	172.92
				550.00
Harrison ave., Main st. to Chestnut. ....	600	15"	C. m.	874.11
	250	8"	Clay	203.61
				1,077.73
Harvard st., Yale to St. James ave. ....	907	12"	Cem.	831.70
St. James ave. to Cornell st..	736	12"	"	25.66
				857.36
Hawley st., Wilbraham road to Monroe st. ....	181	12"	"	40.40
	330	10"	Clay	211.65
				252.05
Hawthorn place, south from Sumner ave. ....	460	10"	"	56.78
	140	8"	"	
north from Pineywoods ave	281	10"	"	....
				56.78

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hawthorn st., west from Hancock .....	441	12"	Cem.	\$445.87
Hayden st., north from State	335	12"	Clay	
	299	10"	"	
	222	8"	"	
Hebron st., north to Chestnut	663	12"	"	492.56
Hickory st., Mill river to Alden st.....	754	20"	"	\$2,388.46
	228	18"	"	
	184	15"	"	
	788	12"	"	
right of way for overflow sewer .....	....	....	....	75.00
				2,463.46
High st.....	810	15"	Cem.	1,331.39
	844	12"	"	
cast from Ingraham ave....	846	12"	Clay	
				2,276.71
Highland st., south from Allen	625	18"	"	1,428.06
	304	15"	"	
	193	12"	"	
	404	10"	"	
Hillman st., Main to Dwight..	350	15"	"	1,436.30
	380	12"	"	
Hillside place, east from Rich- elieu st .....	106	8"	"	....
Holyoke st.....	734	12"	Cem.	928.06
Homer st., south from State..	31	12"	Clay	31.56
	370	10"	"	
Hooker st., east from North Main .....	444	10"	Cem.	39.04
extension to North st .....	255	10"	Clay	....
				39.04
Howard st., west from Water	350	12"	Cem.	364.47
east from Water .....	312	12"	"	289.14
west from Main.....	344	15"	Clay	799.34
	321	12"	"	
				1,452.95
Hubbard ave., east from Main st .....	257	15"	"	630.47
	321	12"	"	
Hunt terrace, north from Allen st .....	279	12"	"	....
Ingersoll grove, north from Worthington st.....	782	12"	Cem.	1,003.05
	218	8"	Clay	
east from Bowdoin st .....	132	10"	"	
				106.53
				1,109.58

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
James st .....	289	15"	Cem. }	
	534	12"	" }	\$924.38
Jefferson ave., North Main st. to Chestnut .....	414	12"	" }	\$492.50
	299	20"	Clay }	
	299	18"	" }	1,668.86
	276	15"	" }	
	60	12"	" }	
	78	6"	" }	37.89
rear of south side.....	518	12"	Cem.	364.84
				2,559.09
John st.....	652	12"	"	383.84
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay }	
	551	10"	" }	1,018.18
Kenwood Park, north from Belmont ave .....	130	12"	" }	
	1,127	10"	" }	199.36
King st., Walnut to Hancock	504	15"	Cem. }	
	441	12"	" }	921.37
Hancock to Eastern ave....	710	18"	" }	
	686	15"	" }	1,715.69
Eastern ave. to Logan st....	405	12"	" }	
	72	10"	Clay }	72.72
King st. ave., King st. to Lebanon .....	329	12"	Cem.	2,708.35
Knox st., Mill river to Wind- sor st.....	1,115	15"	" }	
	198	12"	" }	116.35
Ladd st., Eastern ave. to Logan st .....	243	15"	Clay }	
	304	12"	" }	494.32
Lafayette st., St. James ave. to Amherst st .....	582	12"	" }	
	21	10"	" }	514.35
Laurel ave., Conn. river to Plainfield st .....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
				2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	....
Lebanon st. (see Hancock)....	....	3'-6" x 5'-3"	Brick	....
west from Hancock.....	158	2'-0" x 3'-0"	"	1,495.77
Hancock to Eastern ave ...	606	18"	Cem. }	
	816	15"	" }	1,701.38
				3,197.15
Lenox st....	465	10"	Clay	28.35
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	518.35

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Leyfred ter., north from Belmont ave.....	300	18"	Clay	\$957.30
	317	15"	"	
Liberty st., west from Garden brook.....	70	...	Brick	\$1,124.84
	290	12"	Cem.	
Garden brook to Chestnut st.....	967	15"	"	9,123.49
	171	8"	"	
Chestnut to Webster.....	784	2'-4"x3'-6"	Brick	5,383.15
	659	1'-10"x2'-9"	"	
	684	2'-2"x3'-3"	"	2,539.81
Webster to Armory.....	366	3'-0"x4'-6"	"	
	1,282	2'-2"x3'-3"	"	3,126.37
	317	1'-10"x2'-9"	"	
	449	2'-2"x3'-3"	"	21,297.66
north from Armory.....	1,194	24"	Clay	
	616	18'	"	232.47
Lillian st., east from Oak.....	297	12"	"	676.54
Lincoln st., west from Magazine st.....	823	12"	"	1,254.55
	470	18"	"	
Linden st.....	862	15"	"	7.10
Litchfield st., north from Garfield Belmont ave. to Fairfield st.	69	6"	"	
	159	15"	"	335.11
Locust st., York to Mill.....	84	3'-0"x4'-6"	Brick	6,804.18
	364	2'-9"x4'-1 1/2"	"	
	686	2'-6"x3'-9"	"	67.64
Logan st., north from Ladd..	88	10"	Clay	
north from Granville.....	200	10"	"	147.48
Lombard st.....	500	12"	Cem.	215.12
Long Hill st. and Washington ave., extension east from pipe.....	650	2'-4"x3'-6"	Brick	6,930.76
	823	2'-2"x3'-3"	"	
Long Hill st., west from Washington ave.....	399	15"	Clay	953.28
	185	12"	"	
	487	10"	"	324.90
south from Sumner ave.	356	8"	"	
south from Warner pl.....	423	10"	"	379.51
east from Conn. river.....	1,310	24"	"	2,086.09
submerged outlet.....	26	18"	"	5,387.70
	290	18"	Wood	
	28	18"	C. I.	16,062.24
Loring st.....	650	12"	Cem.	
				750.93



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
James st .....	289	15"	Cem. }	
	534	12"	" }	\$924.38
Jefferson ave., North Main st. to Chestnut .....	414	12"	"	\$492.50
	299	20"	Clay }	
	299	18"	" }	1,663.86
	276	15"	" }	
	60	12"	" }	
	78	6"	"	37.89
rear of south side.....	518	12"	Cem.	364.84
				2,559.00
John st.....	652	12"	"	333.84
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay }	
	551	10"	" }	1,018.18
Kenwood Park, north from Belmont ave .....	130	12"	" }	
	1,127	10"	" }	139.36
King st., Walnut to Hancock	504	15"	Cem. }	
	441	12"	" }	921.87
Hancock to Eastern ave....	710	18"	"	
	686	15"	"	1,715.69
Eastern ave. to Logan st....	405	12"	"	
	72	10"	Clay }	72.72
King st. ave., King st. to Lebanon .....	329	12"	Cem.	2,709.78
				333.15
Knox st., Mill river to Wind- sor st.....	1,115	15"	" }	
	198	12"	" }	116.18
Ladd st., Eastern ave. to Logan st .....	243	15"	Clay }	
	304	12"	" }	494.98
Lafayette st., St. James ave. to Amherst st .....	582	12"	" }	
	21	10"	" }	514.08
Laurel ave., Conn. river to Plainfield st .....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
				2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	....
Lebanon st. (see Hancock)...	....	3'-6"x5'-3"	Brick	....
west from Hancock.....	158	2'-0"x3'-0"	"	1,495.77
Hancock to Eastern ave ...	606	18"	Cem. }	
	816	15"	" }	1,701.28
				3,197.05
Lenox st....	465	10"	Clay	33.
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	516.7

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Leyfred ter., north from Belmont ave.....	300	18"	Clay	\$957.30
	317	15"	"	
Liberty st., west from Garden brook.....	70	...	Brick	\$1,124.84
	290	12"	Cem.	
Garden brook to Chestnut st.....	967	15"	"	9,123.49
	171	8"	"	
Chestnut to Webster .....	784	2'-4"x3'-6"	Brick	5,383.15
	659	1'-10"x2'-9"	"	
	684	2'-2"x3'-3"	"	2,539.81
Webster to Armory... ..	366	3'-0"x4'-6"	"	
	1,282	2'-2"x3'-3"	"	3,126.37
	317	1'-10"x2'-9"	"	
	449	2'-2"x3'-3"	"	21,297.66
north from Armory .....	1,194	24"	Clay	
	616	18"	"	232.47
Lillian st., east from Oak.....	297	12"	"	676.54
Lincoln st., west from Magazine st.....	823	12"	"	1,254.55
Linden st .....	470	18"	"	7.10
	862	15"	"	
Litchfield st., north from Garfield Belmont ave. to Fairfield st.	69	6"	"	342.21
	159	15"	"	
Locust st., York to Mill.....	84	3'-0"x4'-6"	Brick	6,804.18
	364	2'-9"x4'-11"	"	
	686	2'-6"x3'-9"	"	67.64
Logan st., north from Ladd..	88	10"	Clay	
north from Granville.....	200	10"	"	147.48
Lombard st.....	500	12"	Cem.	215.12
Long Hill st. and Washington ave., extension east from pipe .....	650	2'-4"x3'-6"	Brick	6,930.76
	823	2'-2"x3'-3"	"	
Long Hill st., west from Washington ave.....	399	15"	Clay	953.28
	185	12"	"	
	487	10"	"	324.90
south from Sumner ave.	356	8"	"	
south from Warner pl .....	423	10"	"	379.51
east from Conn. river .....	1,310	24"	"	2,086.09
submerged outlet.....	26	18"	"	5,387.70
	290	18"	Wood	
	28	18"	C. I.	16,062.24
	650	12"	Cem.	
Loring st .....				760.93

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Lowell st., dike to Plainfield st.....	305 396 396 283	18" 15" 12" 10"	Clay " } " } " }	\$986.1
Lyman st .....	1,335 720	2'-0" x 3'-0" 15"	Brick Cem.	
				\$6,113.12 1,655.26
				7,768.1
Madison ave., north from Cen- tral st .....	310 100	10" 8"	" } " }	64.1
Magazine st.....	682 249	18" 15"	" } " }	
				1,108.1
Magnolia terrace, east side, Sumner ave. to Spruceland....	586 90	8" 8"	Clay " }	81.4
west side, Sumner ave. to Spruceland .....	622 362	8" 24"	" } " }	
north from Washington ave.	602	12"	" }	....
Main st., including cost of parts in Carew and Franklin..	523	12"	Cem.	944.47
south from Sargeant st.....	341 442 480 186	24" 20" 18" 15"	Clay " } " }	2,539.81
south from Locust .....	800	15"	" }	
York to B. & A. R. R. ....	56 1,772 906 990	7'-0" cir. 6'-6" cir. 5'-6" cir. 5'-0" cir.	Brick " } " }	20,812.99
	1,624 864 263	3'-4" x 5'-0" 2'-4" x 3'-6" 12"	" } " }	
			Clay	164.83
				60,207.3
Main st., I. C) .....	2,321 500 185 103	2'-4" x 3'-6" 18" 15" 12"	Brick Cem. " } Clay	7,636.81 837.71 128.49
Cedar to Lyons st.....	1,110 205 245 129	2'-0" x 3'-0" 24" 18" 12"	Brick Clay " } " }	
east from Lyons st.....				5,024.19 1,334.58
				14,961.3
Malden st, south from Al- len.....	542 291 494	15" 12" 10"	" } " }	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.	
Manhattan st., Eastern ave. to Walnut st.....	290 645 205	15" 12" 10"	Clay	\$826.79	
Maple st., Park to High.....	274	18"	Cem.		
south from Union.....	515 135	18" 12"	"		\$294.91 959.13
north from Pine.....	195 850	15" 12"	"	1,421.68	
south from Temple.....	.....	.....	"		51.55
				2,727.27	
Mapledell st., north from State	337 300 346	15" 12" 10"	Clay	70.80	
Maplewood terrace, east from Fort Pleasant ave.....	682 329 178	15" 12" 10"	"		
Marble st.....	222 586 242	18" 15" 12"	Cem.		1,178.97
Marago ave., east from Bel- mont ave.....	443 612 778	15" 12" 10"	Clay	....	
Margaret st., west from Water	520	12"	Cem.		
east from Water.....	858	12"	"		507.30 801.44
				1,308.74	
Marion st., south from Bay...	833	12"	Clay	795.45	
east from Chapin.....	94 319	10" 8"	"		25.89
					821.34
Market st.....	147 633 123 119	.... 15" 12" 10"	Brick Cem. "	1,066.36	
		Clay	....		1,066.36
Massachusetts ave., south from Wilbraham road.....	300 300 227	15" 12" 10"	"	953.68	
Massasoit place, east from Massasoit st.....	381	12"	Clay		
Massasoit st., north from Carew	709	12"	Cem.		547.51
south from Lexington ave.	300 250	12" 10"	Clay	228.19	
south from Montmorenci...	233	10"	"		168.93
north from Montmorenci...	152	10"	"		92.94
				1,037.57	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Mattoon st.....	356	16"x 24"	Brick }	\$688.50
	87	15"	Cem. }	
Maynard ave., State st. to Shattuck ave.....	431	15"	Clay }	607.88
	400	12"	" }	
McKnight st., Catharine to Sherman.....	255	15"	Cem.	\$421.42
	30	15"	Clay	56.78
Catharine to Bowles.....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles to Girard ave.....	119	12"	Cem.	81.85
	263	10"	Clay	233.51
				936.15
Mechanic st.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
				231.73
Melrose st., Marshall place and Cottage ave.....	263	15"	" }	1,845.00
	74	12"	" }	
	772	10"	" }	
	592	8"	" }	
Merrick ave., south from King st	301	12"	Cem.	48.88
Merwin st., North Main to Chestnut .....	774	15"	Clay	....
Mill river intercepting sewer, Mill river to Locust st. ....	370	5' 3"	Brick }	6,066.64
	691	4'-0"	" }	
Locust st. to Hickory.....	587	4' 0", cir.	" }	42,671.71
	131	3' 6"x 5'-3"	" }	
	1,748	5' 9", cir.	" }	
	779	4' 3", cir.	" }	
	1,611	3' 3", cir.	" }	5,802.38
in Mill and Hickory sts ..	702	2'-2"x 3' 3"	" }	
				54,540.73
Mill st., Locust to Pine .....	943	2'-6"x 3'-9"	" }	4,764.79
east from Main.....	236	8"	Cem.	75.45
				4,840.24
Monmouth st., west from Yale	64	12"	Clay	45.95
	278	10"	"	281.47
northwest from Berkeley...	350	12"	"	235.62
north and east from Dor-				
chester st.....	199	12"	"	218.15
	171	10"	"	121.75
				908.94
Monroe st., Hancock to East-				
ern ave .....	611	18"	Cem. }	1,840.88
	789	15"	" }	
Eastern ave. to Colton st..	316	12"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Monson ave., north from Greene st.....	200	8"	Clay	....
Montmorenci st., Chestnut to Massasoit .....	676	12"	"	\$790.32
Montrose st., State to Burr....	338	15"	"	75.74
	217	12"	"	
	329	10"	"	
Morgan st., west from Garden brook.....	252	12"	Cem.	\$199.08
east from Garden brook....	568	18"	"	1,092.71
	90	18"	Clay	233.10
				1,524.89
Morris st .....	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	317.82
				3,260.65
Mountain View st., north from Park ave.....	297	12"	Clay	....
	297	10"	"	
Malberry st., east from Maple st.....	687	15"	"	1,246.18
	629	12"	"	
extension northerly .....	246	10"	"	
west from Ridgewood ter- race.....	144	15"	"	233.59
				....
Murray Hill ave .....	....	....	"	1,479.77
Myrtle st., north from brook..	107	10"	"	96.24
	237	8"	"	69.76
Myrtle st., I. O., Main to Wor- cester.....	377	24"	"	1,003.44
National ave .....	419	10"	"	23.83
Nelson ave., north from Greene st .....	90	12"	Cem.	27.96
	188	10"	"	126.54
				154.50
Nelson st., east from brick sewer.....	308	24"	Clay	....
New st .....	237	12"	Cem.	213.02
	33	8"	Clay	14.18
				227.20
Newman st., west from Knox	175	12"	Cem.	11.49
North st., Morgan to Ringgold	198	18"	"	356.84
Church to Grosvenor.....	68	18"	"	157.13
north from Carew.....	190	8"	"	84.88
north from Bancroft.....	153	12"	"	114.54
south from Bancroft.....	302	18"	Clay	411.55
north from Calhoun .....	256	8"	"	48.13

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
North st., Osgood to Hebron.	130	18"	Clay	\$426.85 177.12 302.86 ....
north from Jefferson ave...	165	10"	"	
Waverly to Grove st.....	233	8"	"	
south from Harriet .....	362	12"	"	
	86	8"	"	
				\$2,079.90
Northampton ave., south from Wilbraham road .....	1,101	12"	"	830.79
North Church ave., east from Cook's ave .....	209	10"	Cem.	....
west from Cook's ave. (for cost see Cook's ave.)...	133	10"	"	
North Main st., Arch to Os- good .....	730	15"	"	713.66
Arch to Hooker.....	538	18"	"	1,986.64
	606	15"	"	
	270	12"	Clay	359.65
north from Wason ave....	348	12"	"	281.41
north from Morgan.....	173	8"	"	90.69
south from Morgan.....	102	8"	"	41.98
south from Wason ave.....	215	2'-0" x 3'-0"	Brick	860.00
south from Douglas.....	500	1'-8" x 2'-6"	"	1,874.35
north from Douglas.....	326	2'-4" x 3'-6"	"	1,840.24
	272	1'-10" x 2'-9"	"	
north from Eagle .....	142	24"	Clay	449.66
Harriet to Waverly.....	250	24"	"	470.75
				8,969.03
Norwood st., Main to Hanover	1,051	12"	Cem.	1,069.55
Nursery st., Liberty to Franklin	694	2'-8", cir.	Brick	2,284.52
north from Franklin.....	587	2'-8", cir.	"	...
				2,284.52
Oak st., north from Union (for cost see State).....	717	18"	Cem.	....
Union to Tyler.....	220	18"	Clay	752.00
	268	15"	"	
north from Walnut.....	158	18"	Cem.	280.65
				1,032.65
Oak st., I. O., north from Main	179	15"	"	637.00
	171	12"	"	
south from Main st.....	590	2'-2" x 3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
south from Hampshire.....	285	18"	"	1,509.70
	300	15"	"	
	400	12"	"	
				6,145.33
Oak Grove ave., north from State st.....	349	18"	Clay	....
	327	15"	"	
	158	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oakland st., Belmont ave. to Dickinson st.....	503	12"	Clay	\$719.10
	299	10"	"	
north from Dickinson.....	94	8"	"	
				21.29
				<u>\$740.39</u>
Olive st., Eastern ave. to Logan st.....	540	10"	"	400.76
Orange st., west from White st	381	12"	"	961.85
	649	10"	"	
east from White st.....	699	10"	"	
east from Highland st....	583	8"	"	
Orchard st., west from Plain- field st.....	325	20"	"	1,015.67
	301	15"	"	
	297	12"	"	
	140	10"	"	
Orleans court, west from Or- leans st.....	205	8"	"	....
Orleans st., north from Union	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	"	
north from Tyler.....	188	10"	Cem.	146.13
north from Pendleton ave	231	12"	"	327.73
				<u>966.28</u>
Osgood st., Garden brook to North st.....	92	18"	Clay	174.87
	588	18"	Cem.	1,544.57
west from Garden brook....	257	12"	"	
				<u>1,719.44</u>
Ozark st., south from Grand ave.	456	10"	Clay	....
Oxford st., north from Cres- cent terrace.....	63	12"	"	....
Palmer ave., east from Locust st.	14	12"	Cem.	....
	351	18"	Clay	1,165.79
	337	15"	"	
				<u>1,165.79</u>
Park ave., north from Sumner	567	12"	"	123.15
south from Sumner.....	500	10"	"	....
east from Fort Pleasant ave	1,081	24"	"	....
extension to Garfield st....	325	20"	"	1,217.48
	562	18"	"	
east and north from Haw- thorn place.....	341	12"	"	....
	380	10"	"	
				<u>1,340.63</u>
Park st.....	1,140	18"	Cem.	1,393.35
Parker st., from Loon pond to B. & A. R. R.....	1,227	12	Clay	1,266.36



## SEWER CONSTRUCTION—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Parker st., south from Chico- pee river. ....	32 221	24" 12"	Clay " }	\$261.81
				\$1,538.17
Pasadena ave., south from White st. ....	156 291	12" 10"	" " }	258.61
Pasco st., I. O., south from Essex	622	10"	"	537.36
Patton st., east from Garden brook. ....	1,238	15"	Cem.	46.18
west from Garden brook. ....	214	10"	Clay	173.73
				219.91
Pearl st. ....	190	...	Brick	96.16
Chestnut to Spring. ....	514 447	24" 20"	Clay " }	1,792.62
				1,888.78
Pendleton ave., Walnut st. to Hancock. ....	287 524 429	18" 15" 12"	Cem. " " }	1,603.16
Hancock st. to Eastern ave.	600 793	18" 15"	" " }	1,395.98
				2,999.14
Phoenix ave. ....	236 250 89	18" 15" 10"	Clay " " }	840.22
Pine st., Mill to Cedar. ....	740 2'- 1,529 3'- 500 3'-10"	6" x 3'-9" 6" x 5'-3" 10" x 5'-9"	Brick " " }	13,659.54
Pine st., Cedar to Walnut. ....	62 884 631	18" 15" 12"	Cem. " " }	1,665.54
				15,325.08
Pine st., I. O. ....	1,896	24"	"	4,170.08
Pine st. court, east from Pine st.	348	10"	"	266.20
Pineywoods ave., east from Magnolia terrace. ....	343 404	20" 12"	Clay " }	....
west from Magnolia terrace	350	10"	"	....
northeast from Washington ave. ....	334 263	15" 12"	" " }	....
Plainfield st., Bradford to C. R. R. R. ....	1,431	12"	Cem.	1,039.59
Wason ave. to Demond. ....	304 249 53	24" 20" 18"	Clay " " }	1,253.59
Rowland ave. to Talcott ...	274 299	24" 20"	" " }	1,208.95

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Terrence st.....	48	10"	Cem.	\$34.02
	374	12"	Clay	565.26
	313	10"	" }	
				\$599.28
Thompson st., south from Worthington .....	603	12"	Cem.	638.27
St. James ave. to Bay.....	703	15"	"	675.99
State to Bay.....	852	12"	"	653.12
				1,967.38
Tyler st., Oak to Hancock....	717	15"	"	1,089.25
	663	12"	" }	
Hancock to Eastern ave...	601	18"	"	778.27
	795	15"	"	644.31
east from Eastern ave.....	251	10"	"	139.49
				2,651.32
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	2,024	3'-4" x 5'-0"	Brick	
	302	2'-6" x 3'-6"	"	27,384.14
	2,688	2'-0" x 3'-0"	"	
	848	1'-8" x 2'-6"	"	
Oak to Orleans.....	404	15"	Cem.	467.96
Stebbins to Orleans .....	428	20"	Clay	737.72
Hancock to Stebbins.....	261	2'-0" x 3'-0"	Brick	
	335	1'-10" x 2'-9"	"	2,307.33
Hancock to Eastern ave....	600	18"	Cem.	
	800	15"	" }	1,413.45
east from Eastern ave.....	248	10"	Clay	152.56
				34,458.84
Vassar st., north from Harvard (flush gate) .....	550	12"	Cem.	
Vernon st., east from Water	639	15"	"	795.08
west from Main.....	216	12"	"	310.68
				1,105.76
Vine st.....	697	12"	"	602.45
Vinton st., Liberty to Franklin	357	12"	Clay	357.63
	262	10"	"	227.15
				584.78
Walnut st., south from State	69	....	Brick	85.23
north from Charter ave ....	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak.....	17	12"	"	20.50
	558	24"	Clay	792.64
Cedar to Oak.....	1,142	2'-0" x 3'-0"	Brick	4,956.57
	272	18"	Cem.	410.04
from Cedar to below Han- cock .....	784	15"	"	
	100	12"	" }	1,073.38
north from Florence.....	53	8"	"	27.12

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut st., Hickory to Florence.....	1,026	12"	Clay	\$992.67
north from Manhattan.....	249	10"	"	212.35
				\$9,471.30
Walter st., east from Birnie ave.	285	12"	Cem.	14.86
Waltham ave., south from Wilbraham road.....	546	12"	Clay	596.61
Wareham st., south from Grand ave.....	419	10"	"	....
Warner place, west from Fort Pleasant ave.....	508	12"	"	....
	198	10"	"	....
extension to Long Hill st...	89	10"	"	51.88
				51.88
Warriner ave., east from Locust st. ....	448	12"	"	399.54
Washburn st., Conn. river to Conn. R. R. R. ....	1,758	7'-0", cir.	Brick	21,678.46
Washington ave. (see Long Hill st.)				
Wason ave., Conn. river to Plainfield st.....	421	3'-10" x 5'-9"	"	15,724.08
Plainfield st. to Fisk ave...	1,051	3'-4" x 5'-0"	"	
Fisk to Birnie .....	634	3'-2" x 4'-9"	"	
Birnie to North Main st ..	247	2'-0" x 3'-0"	"	
Water st., Gardner to Loring.....	474	1'-10" x 2'-9"	"	1,182.58
north from Loring.....	345	12"	Cem.	237.38
Margaret to near State...	721	2'-0" x 3'-0"	Brick	2,284.34
	868	18"	Cem.	
south from Elm.....	275	18"	"	....
Elm to Pyncheon.....	43	2'-0" x 3'-0"	Brick	198.00
	353	2'-6" x 3'-6"	"	2,949.29
north from Pyncheon.....	584	18"	Cem.	1,854.84
north from Worthington...	648	15"	"	
	61	12"	"	
south from Worthington...	225	12"	"	233.50
				8,939.33
Water st. extension.....	....	18"	Clay	8.47
Waverly st., from North Main to Chestnut .....	473	20"	"	1,197.06
	487	10"	"	
Webster st., Liberty to Franklin .....	601	12"	"	395.54
Welcome place, north from Bay st. ....	238	8"	"	....
Wellesley st., east from Cornell st. (flush gate and well holes) .....	373	12"	Cem.	64.8

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellington ave., south from Wilbraham road.....	287	15"	Clay	....
	244	12"	"	
	291	10"	"	
Wendell ave., east from Main st.	458	15"	"	....
Westford ave., south from Wilbraham road.....	300	15"	"	\$676.23
	300	12"	"	
	350	10"	"	
Westminster st., Bay to State.	300	15"	"	\$705.11
	300	12"	"	
	201	10"	"	
south from St. James ave..	773	12"	"	700.02
White st., Allen to Orange...	747	24"	"	1,717.86
	674	20"	"	1,490.97
	274	18"	"	
south from Orange.....	388	15"	"	
extension to Dawson ave ..	292	15"	"	275.73
Whitney ave.....	450	12"	Cem.	3,873.83
Wilbraham ave., south from Wilbraham road.....	1,125	12"	Clay	257.32
Alden st. to Beverly.....	999	10"	"	1,995.86
	1,180	8"	"	
Wilbraham road, east from State st.....	248	12"	Cem.	
State to Northampton.....	1,451	2'-0"x3'-0"	Brick	6,198.76
east from Northampton ave.	472	2'-6"x3'-9"	"	8,970.16
	476	2'-4"x3'-6"	"	
	478	2'-2"x3'-3"	"	
	473	2'-0"x3'-0"	"	
	254	1'-10"x2'-9"	"	
	256	1'-8"x2'-6"	"	
east from brick sewer.....	263	20"	Clay	859.35
	405	12"	"	
Wilcox st., east from Water	548	15"	Cem.	16,186.00
	327	12"	"	891.89
west from Water.....	463	12"	"	205.76
Willard ave., south from Shat- tuck .....	215	8"	Clay	1,097.65
north from State.....	282	18"	"	785.26
	300	15"	"	
	241	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
William st. ....	1,576	12"	Cem.	\$1,435.86
west from Water.....	76	15"	" }	459.79
	425	12"	" }	
Willow st., Cross to State...	413	12"	Clay	791.42
Cross to Park.....	265	12"	"	378.17
Union to Park .....	216	18"	Cem.	325.32
south from Union.....	220	15"	"	302.23
				1,791.28
Winchester st. ....	424	12"	Clay	26
Windsor ave., south from State st .....	349	10"	"	22
Windsor st., west from Knox	80	15"	Cem. }	...
	485	10"	" }	
Winthrop st.....	52	18"	" }	
	141	15"	" }	23
	520	....	Stone }	
Woodside ave., north from Belmont ave.....	451	10"	Clay	23
Worcester ave., Plainfield to Birnie ave.....	1,486	15"	Cem.	5
Worcester st., I. O., east from Oak .....	275	12"	Clay }	519.07
	212	10"	" }	
east from Pine .....	546	20"	"	768.42
west from Myrtle .....	4	24"	" }	945.80
	290	20"	" }	
	382	2'-0" x 3'-0"	Brick	1,283.00
Worthington st., submerged outlet .....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
Conn. river to Main st.....	1,038	5'-7" x 7'-0"	Brick }	33,410.12
Main to Dwight. ....	821	5'-4" x 7'-0"	" }	
Dwight to Garden brook ..	566	4'-0" x 6'-0"	" }	
from Dwight st. to east of Chestnut .....	530	5'-0" x 5'-3"	"	3,015.70
extension to Spring st ....	738	4'-3"	"	
including Spring st., north from Worthington...	35	5'-0"	"	4,361.35
Spring st., south from Worth- ington .....	47	2'-0" x 3'-0"	"	
east from main sewer.....	804	18"	Cem. }	1,508.23
	242	15"	" }	
	251	12"	" }	
near Autumn st... ..	338	12"	"	355.36
near Sackett's ave. ....	145	10"	"	111.47
east from West brook.....	329	15"	Clay }	1,110.54
	217	12"	" }	

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington st., Sackett's ave to Federal st. ....	1,131	12"	Clay	\$1,113.49
head of Magazine. ....	158	18"	"	375.10
near Magazine to St. James ave. ....	248	2'-8"x4'-0"	Brick	12,493.94
	354	2'-1"x3'-1½"	"	
	1,614	3'-4"x5'-0"	"	
Yale st., Dartmouth to Harvard	350	15"	Cem.	555.06
Harvard to Princeton. ....	842	12"	"	75.83
north from Princeton. ....	712	12"	Clay	452.46
York st. ....	1,203	7'-8", cir.	Brick	1,083.35
				13,912.27
Total .....	509,076			\$1,194,901.63

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Elliptical shaped. ....	635	7'- 3"x4'-10"	Brick and cem. mortar.
" " " " " " " " " " " "	1,080	7'- 0"x4'- 8"	" " " "
" " " " " " " " " " " "	1,170	6'- 9"x4'- 6"	" " " "
" " " " " " " " " " " "	1,038	5'- 7"x7'- 0"	" " " "
" " " " " " " " " " " "	821	5'- 4"x7'- 0"	" " " "
" " " " " " " " " " " "	460	4'-10"x7'- 3"	" " " "
" " " " " " " " " " " "	869	4'- 8"x7'- 0"	" " " "
" " " " " " " " " " " "	1,040	4'- 4"x6'- 6"	" " " "
" " " " " " " " " " " "	1,980	4'- 2"x6'- 3"	" " " "
" " " " " " " " " " " "	750	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	131	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	16	2'-10"x4'- 3"	" " " "
Egg shaped. ....	566	4'- 0"x6'- 0"	" " " "
" " " " " " " " " " " "	1,101	3'-10"x5'- 9"	" " " "
" " " " " " " " " " " "	2,345	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	3,381	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	12,030	3'- 4"x5'- 0"	" " " "
" " " " " " " " " " " "	1,592	3'- 2"x4'- 9"	" " " "
" " " " " " " " " " " "	3,696	3'- 0"x4'- 6"	" " " "
" " " " " " " " " " " "	2,028	2'-10"x4'- 3"	" " " "
" " " " " " " " " " " "	364	2'- 9"x4'- 11"	" " " "
" " " " " " " " " " " "	4,999	2'- 8"x4'- 0"	" " " "
" " " " " " " " " " " "	4,515	2'- 6"x3'- 9"	" " " "
" " " " " " " " " " " "	655	2'- 6"x3'- 6"	" " " "
" " " " " " " " " " " "	150	2'- 5"x3'- 7 1/2"	" " " "
" " " " " " " " " " " "	8,343	2'- 4"x3'- 6 1/2"	" " " "
" " " " " " " " " " " "	8,531	2'- 2"x3'- 3"	" " " "
" " " " " " " " " " " "	603	2'- 1"x3'- 1 1/2"	" " " "
" " " " " " " " " " " "	21,241	2'- 0"x3'- 0"	" " " "
" " " " " " " " " " " "	3,404	1'-10"x2'- 9"	" " " "
" " " " " " " " " " " "	2,382	1'- 8"x2'- 6"	" " " "
" " " " " " " " " " " "	917	1'- 6"x2'- 3"	" " " "
Box with semi-circular top. .	530	5'- 0"x5'- 3"	Plank, stone, brick, and cement mortar.
Segmental. ....	89	6'- 0"x4'- 3"	Brick and cement mortar
" " " " " " " " " " " "	60	5'- 0"x2'- 1"	Concrete.
Miscellaneous shapes. ....	10,824	4'-0" and under	Stone, brick, and mortar
Circular. ....	3,017	7'-0"	Brick and cement mortar
" " " " " " " " " " " "	3,019	6'-6"	" " " "
" " " " " " " " " " " "	1,330	6'-0"	" " " "
" " " " " " " " " " " "	1,743	5'-9"	" " " "
" " " " " " " " " " " "	3,842	5'-6"	" " " "
" " " " " " " " " " " "	948	5'-3"	" " " "
" " " " " " " " " " " "	2,257	5'-0"	" " " "
" " " " " " " " " " " "	3,274	4'- 6-10'	" " " "
" " " " " " " " " " " "	1,762	4'-6"	" " " "
" " " " " " " " " " " "	3,362	4'-3"	" " " "
" " " " " " " " " " " "	952	4'-1"	" " " "

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	2,399	4'-0"	Brick and cement mortar.
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	40	2' 0'	" " "
" .....	19,891	24"	Clay pipe.
" .....	14,340	20"	" "
" .....	14,639	18"	" "
" .....	29,016	15"	" "
" .....	64,477	12"	" "
" .....	51,112	10"	" "
" .....	13,124	8"	" "
" .....	475	6"	" "
" .....	29,058	18"	Cement pipe.
" .....	48,458	15"	" "
" .....	77,781	12"	" "
" .....	5,163	10"	" "
" .....	405	8"	" "
" .....	96	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	550	24"	Wood pipe.
" .....	290	18"	" "
Total.....	509,076		

Classified as follows:—

	Feet.	Miles.
Brick and cement mortar, . . . .	128,759	24.38
Miscellaneous materials, . . . .	12,378	2.34
Clay pipe, . . . .	215,455	40.80
Cement pipe, . . . .	152,484	28.88
Total, . . . .	509,076	96.40



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
William st. ....	1,576	12"	Cem.	\$1,435.86
west from Water. ....	76	15"	"	459.79
	425	12"	"	
				\$1,895.
Willow st., Cross to State ...	413	12"	Clay	791.42
Cross to Park. ....	265	12"	"	378.17
Union to Park. ....	216	18"	Cem.	325.32
south from Union. ....	220	15"	"	302.23
				1,797.
Winchester st. ....	424	12"	Clay	357.
Windsor ave., south from State st. ....	349	10"	"	222.
Windsor st., west from Knox	80	15"	Cem. }	
	485	10"	" }	
Winthrop st. ....	52	18"	"	220.
	141	15"	"	
	520	....	Stone }	
Woodside ave., north from Belmont ave. ....	451	10"	Clay	321.
Worcester ave., Plainfield to Birnie ave. ....	1,486	15"	Cem.	33.
Worcester st., I. O., east from Oak. ....	275	12"	Clay }	519.07
	212	10"	" }	
east from Pine. ....	546	20"	"	768.42
west from Myrtle. ....	4	24"	"	945.80
	290	20"	"	
	382	2'-0" x 3'-0"	Brick	1,283.00
Worthington st., submerged outlet. ....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
Conn. river to Main st. ....	1,038	5'-7" x 7'-0"	Brick }	33,410.12
Main to Dwight. ....	821	5'-4" x 7'-0"	" }	
Dwight to Garden brook ...	566	4'-0" x 6'-0"	"	3,015.70
from Dwight st. to east of Chestnut. ....	530	5'-0" x 5'-3"	"	
extension to Spring st. ....	738	4'-3"	"	4,361.35
including Spring st., north from Worthington. ....	35	5'-0"	"	
Spring st., south from Worth- ington. ....	47	2'-0" x 3'-0"	"	1,508.23
east from main sewer. ....	804	18"	Cem. }	
	242	15"	"	
	251	12"	"	
near Autumn st. ....	338	12"	"	355.28
near Sackett's ave. ....	145	10"	"	111.47
east from West brook. ....	329	15"	Clay }	1,110.54
	217	12"	" }	

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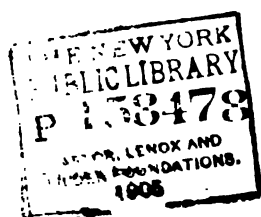
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# Superintendent of Streets and Sewers

## For the Year 1902



THIRTY-FOURTH ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

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COMPLIMENTS OF

ARTHUR A. ADAMS,

Superintendent of Streets and Sewers.

Company, corporation tax, . . .	32,525 36	
From other departments and private parties, . . . . .	16,728 60	
Walks and Curbing,—from regular appropriation, . . . . .	14,000 00	
From other departments, private parties and transfers, . . . .	21,695 37	
Street Watering,—from regular appropriation, . . . . .	8,500 00	
From assessments, private parties and transfers, . . . . .	18,153 01	
Total,	<u>          </u>	\$310,185 08

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1908

# THIRTY-FOURTH ANNUAL REPORT

## OF THE

# STREET DEPARTMENT.

SPRINGFIELD, MASS., December 29, 1902.

*to the City Council.*

I have the honor of presenting statements of receipts and expenditures of the Street Department, also descriptions of work completed and begun during the financial year ending December 31, 1902.

### FINANCIAL STATEMENT.

#### RECEIPTS.

Highways and Bridges,—from regular appropriation, . . . . .	\$125,000 00	
From Springfield Street Railway Company, by agreements, . . . .	73,582 74	
From Springfield Street Railway Company, corporation tax, . . .	32,525 36	
From other departments and private parties, . . . . .	16,728 60	
Walks and Curbing,—from regular appropriation, . . . . .	14,000 00	
From other departments, private parties and transfers, . . . .	21,695 37	
Street Watering,—from regular appropriation, . . . . .	8,500 00	
From assessments, private parties and transfers, . . . . .	18,153 01	
Total, . . . . .		\$310,185 08



## REPORT ON STREETS.

## EXPENDITURES.

Highways and Bridges, . . . . .	\$247,084 87	
Walks and Curbing, . . . . .	33,460 40	
Street Watering, . . . . .	26,651 85	
	<u>\$307,147 12</u>	
Balance unexpended, . . . . .	3,037 96	\$310,184

## CLASSIFIED WORK.

Gravel roadways, . . . . .	101,588 sq. yd.
Macadam and gravel resurfacing, . . . . .	71,608 " "
Macadam roadways, . . . . .	58,525 " "
Brick pavement, . . . . .	12,649 " "
New crosswalks, . . . . .	47
Brick sidewalks (new), . . . . .	15,818 feet
Brick sidewalks (relaid), . . . . .	2,388 " "
Tar concrete sidewalks (new), . . . . .	6,059 " "
Tar concrete sidewalks (resurfaced), . . . . .	672 " "
Curbing set, . . . . .	21,689 " "
Curbing reset, . . . . .	9,587 " "
Streets watered, . . . . .	74 "

## ITEMIZED FINANCIAL STATEMENT.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

From regular appropriation, . . . . .	\$125,000 00	
From Springfield Street Railway Company, by agreement, account locations, . . . . .	55,000 00	
From Springfield Street Railway Company, Plainfield street paving, . . . . .	17,000 00	
From Springfield Street Railway Company, White street paving, . . . . .	1,582 74	
From Springfield Street Railway Company, corporation tax, . . . . .	32,525 36	
From other departments and private parties, . . . . .	16,728 60	\$247,836

## EXPENDITURES AND TRANSFERS.

Bridges, small repairs, . . . . .	\$522 80
City teams, . . . . .	2,449 57
City yard, . . . . .	2,589 75
Department and general expenses, . . . . .	3,322 87
Engineering department, account maintenance, . . . . .	113 18
Engineering department, account macadam and gravel, . . . . .	312 36
Engineering department, account paving, . . . . .	138 00
Material on hand, . . . . .	1,437 96
North End bridge, . . . . .	1,886 09
Old Toll bridge, . . . . .	595 18
Salary, . . . . .	1,800 00
South End bridge, . . . . .	780 49
Shed and supplies for rollers, . . . . .	330 50
Street cleaning apparatus, . . . . .	618 52
Streets, repairs and cleaning, . . . . .	82,073 09
Streets, widened, graded and graveled, . . . . .	36,233 42
Streets macadamized, . . . . .	32,366 80
Streets paved, . . . . .	33,082 26
Land damages in connection with street widening, . . . . .	23,778 71
Tools, . . . . .	1,457 59
Labor and material charged to other departments, . . . . .	6,845 36
Labor and material charged to private parties, . . . . .	11,950 35
Transferred to street watering, . . . . .	400 00
Transferred to sewers and drains, . . . . .	350 00
Transferred to walks and curbing, . . . . .	2,450 00
	<u>\$247,884 85</u>
Less earnings of steam rollers, . . . . .	849 98
	<u>\$247,034 87</u>
Amount unexpended, . . . . .	801 83
	<u>\$247,836 70</u>

## WALKS AND CURBING.

## RECEIPTS.

From regular appropriation, . . . . .	\$14,000 00	
From highways and bridges, transferred, . . . . .	2,450 00	
From abutters for walks laid, . . . . .	19,245 87	
		<u>\$35,695</u>

## EXPENDITURES.

Department and general expenses, . . . . .	\$254 10	
Services of City Engineer's assistants, . . . . .	620 47	
Setting and resetting curbing, not chargeable to abutters, . . . . .	5,413 55	
Work and material not chargeable to abutters, . . . . .	1,961 71	
Work and material chargeable to abutters, . . . . .	19,910 95	
Crosswalks, . . . . .	4,180 58	
Material on hand, . . . . .	1,119 04	
		<u>\$33,460 40</u>
Amount unexpended, . . . . .	2,234 97	<u>\$35,695</u>

## WATERING STREETS.

## RECEIPTS.

From appropriation, . . . . .	\$8,500 00	
From abutters by assessment, . . . . .	15,083 69	
From bills rendered, . . . . .	581 24	
From Springfield Street Railway Company, . . . . .	2,088 08	
From highways and bridges, transferred, . . . . .	400 00	
		<u>\$26,653</u>

## EXPENDITURES.

Equipment, . . . . .	\$2,651 65	
Repairs on carts and general expense, . . . . .	1,662 83	
For use of teams as per contract, . . . . .	19,206 91	
Inspection, . . . . .	803 30	
Standpipes, construction and repairs, . . . . .	2,327 16	
		<u>\$26,651 85</u>
Amount unexpended, . . . . .	1 16	<u>\$26,653</u>

## GRADING AND GRAVELING.

Name.	Limits.	Length in feet.	Area in sq. yards.	Cost of Miscellaneous Work.	Cost of Grading and Graveling.	Total Cost.
Belmont avenue X to White street,	. . . . .	3,776	16,781	fence and walk \$516 70	\$3,411 60	\$3,928 30
Belmont avenue X to Garfield street,	. . . . .	1,560	1,733		609 18	609 18
Berkshire street, State street to } Oak street, Indian Orchard, }	. . . . .	15,167	48,028	fence, } bridge, etc. }	18,261 96	21,274 64
Hyde avenue, Plainfield street to Fisk avenue,	. . . . .	927	3,090		263 47	263 47
Main street, I. O., Rogers line to Wilbraham line,	. . . . .	2,000	6,333	fence	1,203 09	1,283 09
Orange street at junction of Dickinson street,	. . . . .	600	2,000	walk, etc.	1,031 32	1,691 02
White street, Belmont avenue to East Longmeadow line,	. . . . .	1,712	7,228	culvert	4,274 72	4,989 97
Wilbraham road, Westford avenue to top of hill,	. . . . .	4,222	16,345		964 21	964 21
Total,	. . . . .	29,964	101,538	\$4,984 33	\$30,019 55	\$35,003 88

## MACADAM AND GRAVEL RESURFACING.

Name.	Limits.	Length in feet.	Area in sq. yds.	Total Cost.
Broad street, Main to Hanover, macadam,		959	3,177	\$1,033 48
Buckingham street, Buckingham place to		-		
State street, gravel,		1,600	5,000	668 00
Carew street, Main to Chestnut, macadam,		1,622	4,602	1,252 14
Eastern avenue, Wilbraham road to King street, macadam,		2,053	6,781	1,708 55
Emery street, Main to Fulton, macadam,		648	1,541	439 44
Hampden street, Main to Water, macadam,		607	1,866	598 36
Hillman street, Main to Dwight, macadam,		647	1,582	473 60
Lyman street, Chestnut to Spring, macadam,		730	2,648	1,114 94
North Main street, Grove to Chicopee line, macadam,		3,981	12,131	1,871 02
Pine street, Cedar to Maple, macadam,		1,781	6,819	1,983 42
Pynchon street, Main to Water, macadam,		868	2,148	659 85
State street, Main to Water, macadam,		953	3,259	1,127 65
State street, east from Highland Division, N. Y., N. H. & H. R. R., macadam, south side,		2,624	4,592	1,141 57
State street, east from Highland Division, N. Y., N. H. & H. R. R., macadam, north side,		5,010	8,767	2,180 13
St. James avenue, State to Thompson, macadam,		1,632	5,234	1,161 07
Vernon street, Main to Water, macadam,		822	1,461	691 06
Total, . . . . .		26,537	71,608	\$18,104 33

## STREETS MACADAMIZED.

Name.	Lengths.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Auburn street, Fulton to Main.	.	787	1,042	\$0.389+	\$756 30
Belmont avenue, 400 ft. east Woodside avenue to Hall street,	.	.	.	.	813 93
Bowdoin street, St. James avenue to Worthington street,	.	.	report (1901)	.	.
Calhoun street, North Main to Chestnut,	.	1,152	3,837	.475+	1,825 74
Demond avenue, Plainfield street to Fisk avenue,	.	1,129	3,435	.384	1,318 84
Florida street, Bay to Worthington,	.	859	2,863	.529+	1,515 92
Hickory street, Walnut street to Eastern avenue,	.	1,407	4,666	.469+	2,191 85
Holyoke street, Fulton to Main,	.	951	2,413	.502+	1,212 74
John street, Fulton to Plainfield,	.	776	2,001	.323+	648 07
Massasoit street, Carew to Prospect,	.	640	2,138	.439+	937 84
Merwin street, North Main to Chestnut,	.	851	2,803	.412+	1,155 79
Mill street, Pine to Dickinson,	.	.	report (1901)	.	1,200 00
Myrtle street, State to High,	.	1,676	6,706	.484	3,245 45
Plymouth street, Fulton to Plainfield,	.	484	997	.466+	465 19
Sheldon street, Birnie avenue to North Main street,	.	479	1,597	.423+	676 10
State street, north side from 14 ft. west of State street avenue to Berkshire street,	.	651	2,027	.682+	1,382 75
State street, south side Dresden avenue to Berkshire street,	.	2,898	4,922	.598+	9,142 24
White street, Allen to Orange,	.	5,287	10,362	.	2,189 45
Winthrop street, Main to Dale,	.	1,610	3,421	.64	1,386 08
	.	659	2,397	.578+	.
Total,	.	22,296	58,525	.	\$32,061 28

## BRICK PAVING.

	Length in feet.	Area in sq. yds.	Cost.
Plainfield street, Main to Fulton, paving and inlets,	1,710	10,249	\$25,467 51
Plainfield street, walks restored,			2,401 07
White street, Allen to Orange, paving,	1,610	2,400	5,213 68
Total, . . . . .	3,320	12,649	\$33,082 26

## MACADAM REPLACED BY PAVING.

	Length in feet.	Area in sq. yds.	Gutter, sq. yds.
Plainfield street, . . . . .	1,551	5,846	491

## LAND DAMAGES.

Provision was made for the payment of the following amounts from Highways and Bridges appropriation on account of relocation of streets.

Belmont avenue, . . . . .	\$5,132 00
Berkshire street, . . . . .	3,394 68
Dickinson street, . . . . .	235 00
Plainfield street, . . . . .	13,296 80
State street, . . . . .	235 23
White street, . . . . .	1,485 00
	<u>\$23,778 71</u>

## COMBINED STREET EXPENDITURES.

Those streets on which a sum less than \$20.00 has been expended are included in "Sundry Streets."

Alden street, macadam and general repairs, . . . . .	\$49 55
Allen street, gravel and general repairs, . . . . .	1,256 51
Amherst street, gravel repairs, . . . . .	22 51
Andrew street, gravel repairs, . . . . .	24 07
Armory street, inlets, macadam, gravel and general repairs,	
Auburn street, macadam and general repairs, . . . . .	

Bay street, inlets, macadam, gravel, and general repairs, . . .	\$311 83
Belmont avenue, macadam, widening, grading, graveling, inlets, macadam and gravel repairs, . . . . .	6,086 63
Berkshire street, widening, grading, graveling, paving gut- ters, inlets, gravel and general repairs, . . . . .	21,405 34
Bowdoin street, macadam, inlets, gravel and general repairs, . . .	1,916 03
Bridge street, repaving gutters and macadam repairs, . . . . .	89 21
Broad street, inlets, macadam resurfacing and repairs, . . . . .	1,036 97
Buckingham street, gravel resurfacing and repairs, . . . . .	737 39
Burcham Bend road, gravel and general repairs, . . . . .	143 77
Butler street, I. O., general repairs, . . . . .	60 38
Calhoun street, macadam, inlets, and gravel repairs, . . . . .	1,346 62
Carew street, macadam resurfacing, inlets, macadam and general repairs, . . . . .	1,543 50
Cass street, macadam and general repairs, . . . . .	89 35
Central street, macadam repairs, . . . . .	101 92
Chase avenue, inlets, repaving gutters, gravel and general repairs, . . . . .	321 23
Cherry lane, relocation, completion of work of 1901, . . . . .	356 65
Chestnut street, inlets, macadam, gravel and general repairs, . . .	253 47
Clifton avenue, repaving gutters and macadam repairs, . . . . .	41 23
Clinton street, macadam repairs, . . . . .	28 95
College street, inlets, . . . . .	80 17
Congress street, macadam repairs, . . . . .	103 76
Cookey street, gravel and general repairs, . . . . .	367 02
Crystal avenue, gravel repairs, . . . . .	20 15
Cypress street, macadam repairs, . . . . .	43 52
Demond avenue, macadam, general repairs, . . . . .	1,534 67
Dickinson street, inlets, repaving gutters and gravel repairs, . . .	401 19
Dipping Hole road, gravel and general repairs, . . . . .	287 10
Dwight street, general repairs, . . . . .	54 99
Eagle street, inlets, . . . . .	21 81
Eastern avenue, macadam resurfacing, inlets and macadam repairs, . . . . .	1,731 52
Elm street, paving gutters, paving and macadam repairs, . . . . .	106 03
Emery street, macadam resurfacing and paving gutters, . . . . .	651 00
Essex street, I. O., gravel and general repairs, . . . . .	55 51
Everett street, macadam repairs, . . . . .	22 17
Ferry street, macadam repairs, . . . . .	37 23
Florida street, macadam, inlets and repairs, . . . . .	2,198 33
Fort Pleasant avenue, macadam and gravel repairs, . . . . .	171 05



Franklin street, macadam repairs, . . . . .	\$60 97
Fulton street, macadam and general repairs, . . . . .	26 54
Grove street, gravel repairs, . . . . .	32 44
Grosvenor street, macadam and gravel repairs, . . . . .	26 48
Hampden street, inlets, macadam resurfacing and repaving gutters, . . . . .	660 39
Hampshire street, I. O., inlets and gravel repairs, . . . . .	40 07
Hickory street, macadam, inlets and general repairs, . . . . .	1,317 26
High street, macadam and gravel repairs, . . . . .	33 93
Highland street, macadam and gravel repairs, . . . . .	39 49
Hillman street, macadam resurfacing and repaving gutters, . . . . .	586 99
Holyoke street, macadam, . . . . .	648 07
Hubbard avenue, macadam repairs, . . . . .	26 41
Hyde avenue, grading, . . . . .	263 47
John street, macadam, inlets and repairs, . . . . .	947 57
Liberty street, macadam, gravel and general repairs, . . . . .	357 62
Locust street, macadam repairs, . . . . .	20 64
Long Hill street, gravel repairs, . . . . .	21 35
Lynnan street, macadam resurfacing and inlets, . . . . .	1,114 94
Main street, inlets and general repairs, . . . . .	805 10
Main street, I. O., grading, graveling, inlets, gravel and general repairs, . . . . .	1,780 54
Maple street, paving gutters, inlets and macadam repair ¶ . . . . .	343 13
Market street, macadam repairs, . . . . .	26 89
Massasoit street, macadam and repairs, . . . . .	1,167 19
Merwin street, macadam and general repairs, . . . . .	1,244 73
Mill street, macadam, inlets, paving gutters and macadam repairs, . . . . .	3,324 35
Myrtle street, macadam, . . . . .	465 19
Myrtle street, I. O., gravel repairs, . . . . .	29 54
Nelson avenue, gravel repairs, . . . . .	155 02
North street, macadam repairs, . . . . .	23 75
Northampton avenue, gravel repairs, . . . . .	75 35
North Main street, macadam resurfacing, inlets, repaving gutters and macadam repairs, . . . . .	2,500 43
Oak street, I. O., macadam and gravel repairs, . . . . .	143 02
Oakland street, inlets and gravel repairs, . . . . .	81 02
Orange street, inlets, grading and graveling, . . . . .	1,694 02
Orleans street, gravel repairs, . . . . .	24 22
Osgood street, macadam repairs, . . . . .	21
Park avenue, gravel repairs, . . . . .	57

Parker street, I. O., inlets, gravel and general repairs, . . . . .	\$833 69
Parkwood street, inlets, . . . . .	79 47
Pasco street, I. O., gravel repairs, . . . . .	156 65
Patton street, macadam repairs, . . . . .	37 85
Pearl street, repaving gutters and macadam repairs, . . . . .	135 92
Pecousic avenue, macadam and general repairs, . . . . .	50 61
Pine street, macadam resurfacing and repairs, . . . . .	2,051 61
Plainfield street, inlets, paving, relaying walk, macadam and gravel repairs, . . . . .	28,159 66
Plumtree road, gravel and general repairs, . . . . .	292 03
Plymouth street, inlets and new macadam, . . . . .	676 10
Princeton street, gravel repairs, . . . . .	23 02
Prospect street, gravel repairs, . . . . .	31 27
Pynchon street, paving gutters and macadam resurfacing, . . . . .	735 90
Sheldon street, inlets and new macadam, . . . . .	1,394 94
South street, macadam and general repairs, . . . . .	185 69
Spring street, macadam repairs, . . . . .	96 32
Springfield street, gravel repairs, . . . . .	137 87
State street, widening, macadam, inlets, grading, graveling, macadam resurfacing, macadam, gravel and general re- pairs, . . . . .	16,005 84
Stebbins street, gravel repairs, . . . . .	35 11
St. James avenue, macadam resurfacing, macadam and gravel repairs, . . . . .	1,244 24
Summer street, inlet, macadam and general repairs, . . . . .	371 40
Summer avenue, macadam and gravel repairs, . . . . .	47 55
Sundry streets, winter expenses, . . . . .	10,436 48
Sundry streets, cleaning streets, . . . . .	29,405 18
Sundry streets, general repairs, . . . . .	6,878 14
Taylor street, macadam repairs, . . . . .	44 26
Temple street, macadam and general repairs, . . . . .	26 96
Tenth street, macadam repairs, . . . . .	27 17
Thompson street, macadam repairs, . . . . .	69 11
Tinkham road, gravel and general repairs, . . . . .	137 33
Tyler street, gravel repairs, . . . . .	32 65
Union street, macadam and general repairs, . . . . .	83 14
Ventura street, inlets, . . . . .	72 66
Vernon street, macadam resurfacing and repairing gutters, . . . . .	750 56
Walnut street, macadam and general repairs, . . . . .	154 97
Waltham avenue, gravel repairs, . . . . .	56 45
Water street, macadam and general repairs, . . . . .	157 75

Webster street, inlets, . . . . .	\$123 37
West street, macadam repairs, . . . . .	27 61
Westminster street, gravel repairs, . . . . .	20 45
White street, paving, macadam, widening, grading and graveling, inlets and general repairs, . . . . .	12,418 93
Wilbraham road, grading, graveling, paving gutters, inlets, gravel and general repairs, . . . . .	1,923 05
Willow street, macadam repairs, . . . . .	42 42
Winthrop street, macadam, . . . . .	1,386 08
Worcester street, I. O., gravel and general repairs, . . . . .	39 58
Worthington street, inlets, macadam and general repairs, . . . . .	636 60
Total, . . . . .	\$184,112 22
Less amount expended on account of Cherry lane relocation, taken from contingent account, . . . . .	356 65
	<u>\$183,755 57</u>

The above expenditures are summarized as follows:—

Cleaning streets, . . . . .	\$29,405 18
Repairs, . . . . .	42,231 43
Winter expenses, . . . . .	10,436 48
New construction, . . . . .	101,682 48
	<u>\$183,755 57</u>

### WALKS AND CURBS.

Street.	Material.	Description.	Length 4" Curb.	Length 6" Curb.
Allen street,	Brick	New		
Armory street,	Tar concrete	New	201	
Avon place,	Brick	Relaid		
Bancroft street,	Brick	Relaid		
Banks place,			60	
Beaumont street,	Tar concrete	New	1,127	
Belmont avenue,	Tar concrete	New		
Bond street,	Brick	Relaid		
Bowles street,	Tar concrete	Recoated		
Chase avenue,			1,183	
Cherry street,	Tar concrete	New	1,4	
Chestnut street,	Tar concrete	New		

# REPORT ON STREETS.

15

Street.	Material.	Description.	Length 4" Curb.	Length 6" Curb.
Cleveland street,	Tar concrete	New and recoated	7	
Cross street,	Brick	Relaid	260	
Dickinson street,			2,775	
Edwards street,	Brick	Relaid		
Elm street,	Brick	Relaid		
Florence street,	Brick	Relaid		
Florida street,			179	
Forest avenue,	Tar concrete	New		
Fulton street,				1,588
Hall street,			51	
Hancock street,	Brick	Relaid		
Hickory street,	Tar concrete	New	1,053	
Jefferson avenue,	Brick	Relaid		
Liberty street,	Brick	New		1,964
Lyman street,				27
Magnolia terrace,			28	
Main street,	Brick	Relaid		26
Main street, I. O.,			428	
Maple street,				28
Market street,	Brick	Relaid		
McKnight street,	Brick	Relaid.		
Oak street, I. O.,			68	
Plainfield street,	Brick and tar concrete	New and recoated	561	1,401
Pine street,	Brick	Relaid		
Pleasant street,	Brick	Relaid		
Quincy street,			2,501	
School street,	Brick	Relaid		
Sheldon street,			660	100
State street,				14
Stebbins street,	Brick	Relaid		
Summer street,	Brick	Relaid		916
Sumner avenue,			114	
Temple street,			123	
Walnut street,			119	
Webster street,			692	
White street,	Brick	New	1,985	
			15,625	6,064

The cost of these walks chargeable to abutters was \$17,044.80 for labor and material, and 235,114 new brick have been used in their construction.

In addition to the above, 9,537 feet of old curbing have been reset.

### CROSSWALKS.

Forty-seven new crosswalks have been built, in which 74,818 local brick and 6,260 vitrified brick were used.

### INVENTORY.

Property in the hands of the Superintendent of Streets and Sewers, December 10, 1902, is as follows:—

City yard and barns Lyman street, . . . . .	\$12,800 00
Logan street yard, . . . . .	7,000 00
Trap rock quarry, Westfield, . . . . .	225 00
Engine, engine house, trap rock crusher and tools, .	1,700 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Island pond, . . . . .	380 00
Gravel bank, Boston road, . . . . .	80 00
Six steam rollers, . . . . .	14,945 40
Building for roller storage and repairs, . . . . .	1,277 82
Sixteen horses, wagons, sleighs, harness, etc., . .	5,617 45
Thirty-four (34) water carts, . . . . .	5,647 60
Tools and road materials, . . . . .	11,245 38
Total, . . . . .	\$61,018 05

### NEW STREETS.

The following have been accepted as public streets during the year:—

Names.	Limits.	Length in feet.
Arch street, westerly from North Main street, . . .		410
Autumn street, Summer street to Worthington street, .		198
Banks place (formerly Banks avenue), westerly from Water street, . . . . .		225
Beacon street, easterly from Colton street, . . . . .		127
Charles street, southerly from Liberty street, . . . .		
Chestnut street, extension to north line of Eagle street, .		

Dresden street (formerly Dresden avenue), State street to Wilbraham road, . . . . .	739
Farnsworth street, northerly from Hamburg street, . . . . .	513
Firglade avenue, extension to Pineywoods avenue, . . . . .	183
Hamburg street, easterly from Springfield street, . . . . .	575
Leyfred terrace, northerly from Belmont avenue, . . . . .	630
Massachusetts avenue, Wilbraham road to Westford circle, . . . . .	1,459
Maynard street (formerly Maynard avenue), northerly from State street, . . . . .	576
Oak Grove avenue, State street to Burr street, . . . . .	1,040
Parkwood street (formerly National avenue), Sumner avenue to Forest Park, . . . . .	450
Sheridan lane (formerly Sheriden avenue), Morgan street to Church street, . . . . .	318
Westford circle, easterly from Westford avenue, . . . . .	558
Ventura street (formerly Ventura avenue), Sumner avenue to Alderman street, . . . . .	870
Wason avenue, North Main street to B. & M. R. R., . . . . .	510
Welcome place, northerly from Bay street, . . . . .	248
Wight place (formerly Wight avenue), easterly from Water street, . . . . .	388
Total, . . . . .	10,743

The following streets have been relocated during the year : —

- Belmont avenue, widened 10.5 feet, south side, from Garfield street to Sumner avenue, about 1,550 feet.
- Belmont avenue, widened from 49.5 feet to 69.5 feet, from Sumner avenue to Daytona and Lawndale streets, about 1,400 feet.
- Berkshire street, widened from 49.5 feet to 82.5 feet, from State street to Chestnut street, I. O., about 15,000 feet.
- Dickinson street, relocated from Johnson street to Kenwood park, about 350 feet.
- Maple street, south corner of High street, rounded off.
- Maple street, widened east side, south from State street, about 400 feet.
- Orange street, southeast corner of Dickinson street, rounded off.
- Plainfield street, widened from 49.5 feet to 66 feet at B. & M. R. R., about 200 feet.
- State street, relocated from Alden Warner's to Berkshire street, about 1,000 feet.

Warner street, discontinued from White to Allen street, about 3,800 feet.  
White street, relocated from White street to Longmeadow town line, about 1,650 feet.

Further descriptions of work undertaken and completed during the year ending December 10, 1902, would seem unnecessary, as detailed information is given in tabulated form in the preceding portions of this report.

The fact that the Springfield Street Railway Company paid \$78,582.74 in addition to the usual corporation and excise tax being unusual, suggests that general explanation might be in order.

The sum of \$55,000.00 was paid in accordance with an agreement attached to the grants of location for extensions and double tracks through various city streets, and was intended to cover the cost of widening, grading, graveling, and macadamizing, rendered necessary by the presence of such tracks.

The sum of \$17,000.00 was paid in accordance with an agreement to bear one half the cost of widening and paving Plainfield street between Bradford street and the bridge over the Boston and Maine railroad, provided said amount did not exceed \$17,000.00.

The sum of \$1,582.74 was paid in accordance with an agreement to bear the expense of the additional paving around their turnout in White street, the order dated December 16, 1901, for its shortening, having been rescinded by the Board of Aldermen, May 12, 1902.

The lengths of streets which have been watered during the past year amount to 74.55 miles, which is an increase of 4.78 miles over the amount watered during the season of 1901. The use of sprinkling cars, as adopted in 1901, has been discontinued during the past year and eight new carts have been substituted therefor.

Appropriations and receipts made possible the completion of an unusually large amount of street work during the year and it is hoped that there may be no diminution.

amounts for such purposes in succeeding years, as the annual increase of lengths of city streets and attendant cost of repairs and cleaning renders adequate appropriation imperative.

It gives me pleasure to express thanks to Michael Roane and Arthur H. Woodward, first and second assistants.

I would also express my appreciation of the uniform courtesies extended during the year by Mayor Ralph W. Ellis, Alderman Henry W. Fitch, and Councilman Clifford P. Kibbe, members of the Board of Supervisors of Highways and Bridges.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

BOARD OF ALDERMEN, December 29, 1902.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 29, 1902.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 29, 1902.

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 30, 1902.

Approved.

RALPH W. ELLIS, *Mayor.*



## TABLE OF MACADAMIZED STREETS.

NAME OF STREETS	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Acushnet avenue, . . . . .	1,088	3,385	
Adams street, . . . . .	1,003	3,193	133
Alden street, . . . . .	2,776	9,306	
Allen street, . . . . .	2,253	7,599	336
Allendale street, . . . . .	663	2,094	
Arbor street, . . . . .	487	1,222	
Armory street, . . . . .	793	3,240	
Ashley street, . . . . .	1,378	4,592	
Auburn street, . . . . .	787	1,942	
†Avon place, . . . . .	711	2,857	67
Bancroft street, . . . . .	1,435	4,865	
Barnes street, . . . . .	130	561	
Bay street, . . . . .	4,053	12,960	
Belmont avenue, . . . . .	1,576	4,510	45
Bliss street, . . . . .	958	2,418	635
Bond street, . . . . .	1,629	5,112	
Bowdoin street, . . . . .	1,152	3,837	
Boylston street, . . . . .	1,807	864	
Bradford street, . . . . .	862	2,921	14
Bridge street, . . . . .	1,310	3,566	1,189
Broad street, . . . . .	959	3,177	
Brookline avenue, . . . . .	615	2,050	
Butler street, . . . . .	1,525	2,223	662
Byers street, . . . . .	480	1,088	103
Carew street, . . . . .	2,618	5,373	2,299
Calhoun street, . . . . .	1,129	3,435	
Cass street, . . . . .	1,762	5,407	
Catharine street, . . . . .	150	493	
Cedar street, . . . . .	1,962	6,613	42
Central street, . . . . .	4,903	10,357	2,479
Charles street, . . . . .	618	1,888	
Chestnut street, . . . . .	3,889	8,156	1,509
Church street, . . . . .	832	2,553	
City Hall passageways, . . . . .	557	1,004	16
Clarendon street, . . . . .	204	674	
Clinton street, . . . . .	703	1,842	
Congress street, . . . . .	1,550	3,753	

\* Includes macadam laid by Street Railway Company.

† 67 linear feet and 319 square yards owned by private party.

## REPORT ON STREETS.

21

NAME OF STREETS	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Court street, . . . . .	689	1,492	560
Cross street, . . . . .	608	912	504
Cypress street, . . . . .	651	1,746	105
Dale street, . . . . .	812	1,973	78
Dartmouth street, . . . . .	1,132	5,159	
Demond avenue, . . . . .	859	2,863	
Eagle street, . . . . .	556	1,855	
East Court street, . . . . .	369	608	247
Eastern avenue, . . . . .	4,516	*15,297	
Elliott street, . . . . .	1,007	2,681	661
Elm street, . . . . .	220	333	
Elmwood street, . . . . .	886	2,738	
Emery street, . . . . .	648	1,541	565
Essex street, . . . . .	1,606	5,143	
Everett street, . . . . .	1,500	4,056	803
Federal street, . . . . .	353	1,370	
Ferry street, . . . . .	1,357	2,270	1,171
Fisk avenue, . . . . .	1,126	5,005	
Florence street, . . . . .	1,582	5,273	
Florida street, . . . . .	1,407	4,666	
Fort Pleasant avenue, . . . . .	2,794	9,230	908
Franklin street, . . . . .	1,863	5,265	1,221
Framont street, . . . . .	778	2,593	
Fulton street, . . . . .	3,569	10,986	107
Gardner street, . . . . .	1,114	3,713	
George street, . . . . .	110	609	38
Greenwood street, . . . . .	1,561	5,025	
Hampden street, . . . . .	607	1,866	535
Hancock street, . . . . .	3,104	*10,530	
Hickory street, . . . . .	951	2,413	
Hillman street, . . . . .	647	1,582	219
Holyoke street, . . . . .	776	2,001	
Howard street, . . . . .	1,277	3,627	699
Hubbard avenue, . . . . .	568	1,063	
Jefferson avenue, . . . . .	1,275	6,375	
John street, . . . . .	640	2,136	
King street, . . . . .	2,286	*7,492	
Lebanon street, . . . . .	1,926	5,233	
Liberty street, . . . . .	1,008	2,368	618

\* Includes macadam laid by Street Railway Company.

NAME OF STREETS	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Linden street, . . . . .	1,287	4,099	1,049
Locust street, . . . . .	793	1,887	614
Lombard street, . . . . .	590	1,677	
Loring street, . . . . .	707	2,294	
Lyman street, . . . . .	784	2,487	787
Madison avenue, . . . . .	529	1,358	298
Magazine street, . . . . .	784	2,434	
Main street, . . . . .	980	4,861	1,003
Main street, I. O., . . . . .	559	2,022	368
Maple street, . . . . .	3,721	8,488	1,570
Marble street, . . . . .	1,074	3,508	
Margaret street, . . . . .	842	2,807	
Market street, . . . . .	961	1,376	416
Massasoit street, . . . . .	851	2,803	
Mattoon street, . . . . .	524	1,425	350
Merwin street, . . . . .	713	2,377	
Mill street, . . . . .	3,250	12,533	1,031
Morgan street, . . . . .	852	2,914	
Morris street, . . . . .	1,022	3,031	
Mulberry street, . . . . .	991	2,619	637
Myrtle street, . . . . .	484	997	
North street, . . . . .	2,988	10,807	
North Main street, . . . . .	7,115	22,228	2,840
Norwood street, . . . . .	1,117	2,911	
Oak street, . . . . .	1,344	4,069	87
Oak street, I. O., . . . . .	1,097	3,588	463
Olive street, . . . . .	478	1,248	
Osgood street, . . . . .	890	2,948	
Palmer avenue, . . . . .	991	3,177	
Park street, . . . . .	865	2,066	478
Patton street, . . . . .	1,631	5,294	144
Pearl street, . . . . .	1,220	2,699	814
Pendleton avenue, . . . . .	2,582	6,375	170
Pine street, . . . . .	4,420	13,813	531
Plainfield street, . . . . .	655	2,131	150
Plymouth street, . . . . .	479	1,597	
Pyncheon street, . . . . .	868	2,148	662
Rutledge avenue, . . . . .	516	1,599	
Salem street, . . . . .	522	1,078	

## REPORT ON STREETS.

23

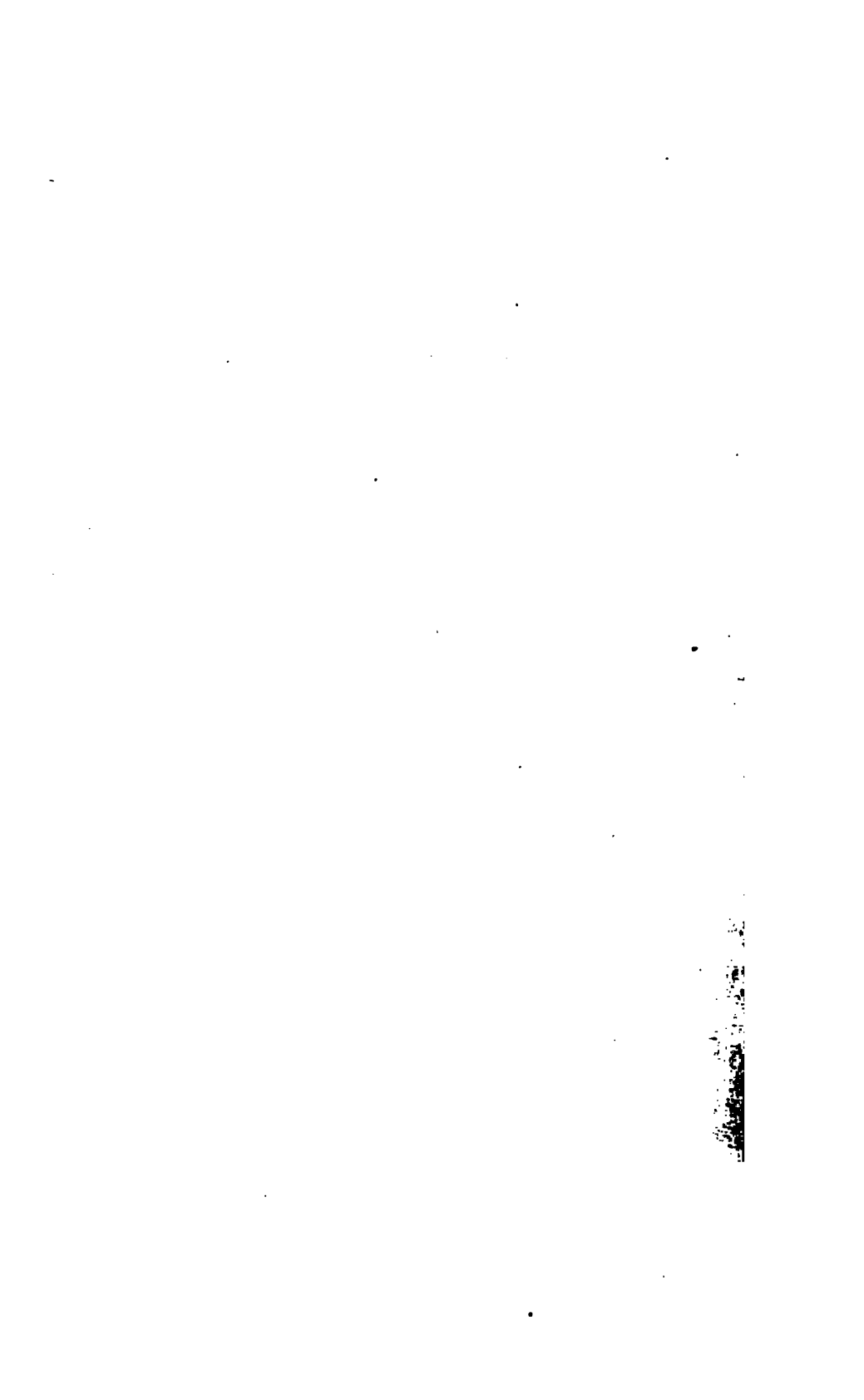
NAME OF STREETS	Lengths in feet.	Areas of macadam in sq. yds.	Areas of gutters in sq. yds.
Sanford street, . . . . .	367	990	288
Sargeant street, . . . . .	860	3,126	
School street, . . . . .	1,415	4,535	62
Seventh street, . . . . .	822	2,529	
Sharon street, . . . . .	1,200	3,895	
Sheldon street, . . . . .	651	2,027	
Sherman street, . . . . .	1,528	5,078	
South street, . . . . .	1,863	6,503	375
Spring street, . . . . .	2,373	5,986	1,336
State street, . . . . .	19,786	*68,628	3,695
Stearns Park avenue, . . . . .	259	461	
St. James avenue, . . . . .	5,440	15,434	
Stockbridge street, . . . . .	635	1,269	348
Summer street, . . . . .	567	1,134	378
Summer avenue, . . . . .	3,215	15,227	
Taylor street, . . . . .	1,183	2,844	1,046
Temple street, . . . . .	953	2,570	
Tenth street, . . . . .	1,577	4,324	127
Thompson street, . . . . .	756	2,478	
Townsley avenue, . . . . .	138	153	61
Union street, . . . . .	6,088	19,425	453
Vernon street, . . . . .	823	1,407	545
Vine street, . . . . .	745	1,892	
Vinton street, . . . . .	612	2,038	427
Walnut street, . . . . .	3,142	*5,450	1,115
Warriner avenue, . . . . .	450	1,601	
Water street, . . . . .	5,145	13,546	2,979
Waverly street, . . . . .	450	1,577	
West street, . . . . .	1,195	3,872	
White street, . . . . .	1,800	*4,040	84
Wilbraham road, . . . . .	1,606	7,741	
Wilcox street, . . . . .	922	3,016	
William street, . . . . .	1,368	4,359	
Willow street, . . . . .	895	1,862	631
Winthrop street, . . . . .	659	2,397	
Worthington street, . . . . .	4,503	*6,498	1,298
York street, . . . . .	1,000	2,997	
Total, . . . . .	229,012	682,900	48,041

\*Includes macadam laid by Street Railway Company.

## TABLE OF PAVED STREETS.

	Lengths in feet.	Areas in sq. yds.
Belmont avenue, 400 feet east from Woodside avenue to Hall street, Catskill paving blocks (1901), . . . . .	1,362	1,211
Bridge street, Main to Dwight, rock asphalt (1900), . . . . .	688	2,525
Catharine street, State to Bay, Syracuse brick (1900), . . . . .	1,722	5,691
Chestnut street, northerly from Lyman street, granite blocks (1889), . . . . .	256	1,471
Chestnut street, north from B. & A. R. R. to Linden street, granite blocks (1892), . . . . .	1,640	5,235
Chestnut street, north from Linden to Carew, granite blocks (1893), . . . . .	773	2,156
Chestnut street, Carew to Allendale, Syracuse brick (1900) . . . . .	1,015	3,432
Chestnut street, Lyman to Worthington, granite blocks (1895), . . . . .	472	1,673
Court street, westerly from Main street, rock asphalt (1897), . . . . .	317	1,277
Court street, easterly from Court Square avenue, Syra- cuse brick (1897), . . . . .		174
Court Square avenue, Court to Elm, rock asphalt (1897), . . . . .	193	503
Court Square avenue, Court to Elm, Syracuse brick (1897), . . . . .		330
Dwight street, State to Lyman, Syracuse brick (1896), . . . . .	2,324	9,905
East Court street, Main to Market, rock asphalt (1900), . . . . .	117	297
Elm street, westerly from Main street, rock asphalt (1897), . . . . .	343	949
Elm street, Main street to Court Square avenue, Syra- cuse brick (1897), . . . . .		330
Fort street, Main to Water, granite blocks (1895), . . . . .	670	1,770
Harrison avenue, Main street to Dwight, Trinidad asphalt (1896), . . . . .	586	2,247
Liberty street, Chestnut to Cass, Syracuse brick (1900), . . . . .	1,399	4,571
Liberty street, Cass to Heywood avenue, Syracuse brick (1901), . . . . .	1,147	3,971
Lyman street, Main to Chestnut, granite blocks (1889), . . . . .	1,305	4,599
Main street, north side, Elm to Court, granite blocks (1887), . . . . .		432
Main street, State to Bridge, granite blocks (1888), . . . . .	1,550	5,857

	Lengths in feet.	Areas in sq. yds.
Main street, Bridge to Lyman, granite blocks (1889),	787	3,065
Main street, Lyman to Liberty, creo-resinate wood block paving (1901), . . . . .	484	2,780
Main street, Liberty to Cypress, granite blocks (1890),	327	1,399
Main street, State street junction, granite blocks (1890),	80	250
Main street, Lyman to State between R. R. tracks, granite blocks (1890), . . . . .		1,078
Main street, Cypress to Emery, granite blocks (1891),	650	3,381
Main street, east side, from end of granite block paving to Carew, Syracuse brick (1897), . . . . .	1,302	4,605
Main street, west side, Emery to Sargeant, Catskill paving blocks (1901), . . . . .	1,447	5,449
Main street, State to Bliss, Syracuse brick (1893), . . . . .	235	1,315
Main street, Bliss to William, granite blocks (1893), . . . . .	1,148	5,475
Main street, William to Marble, Syracuse brick (1896),	1,762	8,307
Main street, Marble to Locust, Syracuse brick (1897),	840	4,381
Plainfield street, Main to Fulton, Syracuse brick, (1902),	1,710	10,249
Sanford street, Main to Market, rock asphalt (1900), . . . . .	102	207
State street, Main to Library, granite blocks (1890),	1,019	4,034
State street, Dwight to Chestnut, widened, granite blocks (1896), . . . . .		217
State street, Federal to Oak, Syracuse brick (1897), . . . . .	847	4,590
Summer street, Autumn to Kibbe avenue, granite blocks (1895), . . . . .	1,259	4,029
Summer street, Kibbe ave. to 85 feet west of Federal street, granite blocks (1901), . . . . .	787	2,635
Walnut street, State to Union, Syracuse brick (1899),	638	2,144
Walnut street, Union to Pendleton avenue, Syracuse brick (1900), . . . . .	873	3,140
White street, Allen to Orange, Syracuse brick, . . . . .	1,610	2,400
Worthington street, Main to Dwight, Syracuse brick (1896), . . . . .	739	2,544
Worthington street, Dwight to Fairbanks ave., Syra- cuse brick (1901), . . . . .	1,060	3,869
Total, . . . . .	37,585	142,149



# THIRTY-FOURTH ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 29, 1902.

To the *Mayor and Board of Aldermen.*

I have the honor to present statements of the receipts and expenditures of the Sewer Department, also descriptions of work completed and begun during the year ending December the 10th, 1902.

The various classifications of work, together with their respective quantities, are as follows:—

538 feet of 8" vitrified clay pipe, . . . .	new construction
519 feet of 8" " " " . . . .	reconstruction
3,591 feet of 10" " " " . . . .	new construction
531 feet of 10" " " " . . . .	reconstruction
555 feet of 12" " " " . . . .	new construction
1,712 feet of 12" " " " . . . .	reconstruction
673 feet of 15" " " " . . . .	new construction
1,586 feet of 15" " " " . . . .	reconstruction
2,313 feet of 18" " " " . . . .	new construction
1,089 feet of 18" " " " . . . .	reconstruction
500 feet of 20" " " " . . . .	new construction
420 feet of 20" " " " . . . .	reconstruction
1,539 feet of 24" " " " . . . .	new construction
2,129 feet of 24" " " " . . . .	reconstruction
316 feet of 2'-2" x 3'-3" brick sewer, . . .	new construction
303 feet of 2'-6" x 3'-0" " " " . . .	new construction

For descriptions and costs of the above sewer construction, you are referred to another part of this report.



It gives me pleasure to express thanks to Michael Roane, Assistant Superintendent of Streets and Sewers, who has had general oversight over sewer work, for his valuable assistance, and to Aldermen Fitch, Bennett, and Bosworth, members of the Committee on Sewers and Drains, for the uniform courtesies they have extended during the year.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

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BOARD OF ALDERMEN, December 29, 1902.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 29, 1902.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 30, 1902.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 30, 1902.

Approved.

RALPH W. ELLIS, *Mayor.*

## NEW SEWER CONSTRUCTION.--1902.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Allen st., extension east to Plumtree road .....	Clay	1,401	10"	\$984 62
Amherst st., relaying .....	Clay	25	12"	23 78
Autumn st., Summer to Worthing- ton .....	Clay	239	15"	715 29
Bay st., Florida to Pleasant, relay- ing .....	Clay	235	12"	321 02
Beaudry st., I. O., southerly from Main st. ....	Clay	270	10"	745 95
		300	12"	
		320	8"	
Benton st., extension southerly .....	Clay	320	8"	419 68
Buckingham place, flush gate .....	....	....	....	9 32
Buckingham st., Bay to Clarendon, relaying .....	Clay	651	12"	571 47
Carew st., flush gate .....	....	....	....	106 74
Chase ave., flush gate .....	....	....	....	24 49
Cherry lane, Mill River to Central st.	Clay	295	10"	1,454 15
		251	12"	
		434	15"	
		398	18"	
Cherryvale ave., flush gate .....	....	....	....	15 74
Clifton ave., southerly from Central st., relaying .....	Clay	215	8"	82 10
Colton st., catch basin .....		....	....	28 56
Commonwealth ave., Belmont ave. to Washington st. ....	Clay	549	18"	2,878 00
		500	20"	
		441	24"	
Congress st., manholes .....	....	....	....	84 93
Cornell st., extension northerly .....	Clay	186	10"	208 20
Dickinson st. ....	Brick	....	....	2,188 14
East Court st., extension westerly ...	Clay	62	10"	119 38
		4	12"	
Florida st., near St. James ave. to Bay st., relaying .....	Clay	525	24"	1,574 89
Forest ave., flush gate .....		....	....	33 51
Fulton st., flush gate .....		....	....	34 66
Grosvenor st., manhole and flush gate	....	....	....	62 36

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Hampshire st., I. O., westerly from Myrtle st.....	Clay	300	10"	\$196 76
Harvard st., Yale to Vassar, relaying .....	Clay	300 316	15" } 18" }	967 94
Johnson st., Dickinson st., easterly..	Clay	496	18"	1,034 18
Kibbe ave., Summer to Worthington st.....	Clay	260	18"	552 92
Lombard st., flush gate.....	....	....	....	15 32
Lyons st., I. O., southerly from Main st.....	Clay	261	18"	352 96
Madison ave., northerly from Central st., relaying.....	Clay	287 250	10" } 12" }	757 27
Magnolia terrace, flush gate .....	....	....	....	14 55
Magnolia terrace, connection at Spruceland ave.....	Clay	62	8"	26 00
Main st., manhole and flush gate....	....	....	....	63 12
Massasoit st., flush gate.....	....	....	....	30 37
Mill River Valley sewer.....	Brick	131	2'-2" x 3'-3" } elliptical }	3,119 56
Morris st., manhole .....	....	....	....	41 25
Myrtle st., I. O., southerly from Berkshire st.....	Clay	180	10"	189 65
North Main st., Arch st. to Jefferson . avenue, relaying.....	Brick	185	2'-2" x 3'-3" } elliptical }	974 27
Jefferson ave. to Grove st., relaying.....	Clay	285 420 359	15" } 20" } 24" }	2,568 01
Oakland st., Dickinson st. to Belmont ave., relaying.....	Clay	895	24"	2,213 71
Oakland st., southerly from Orange st.....	Clay	218	8"	....
Ozark st., flush gate.....	....	....	....	....

## NEW SEWER CONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Park ave., flush gate.....		....	....	\$33 87
Parker st., I. O., southerly from Main st.....	Clay	1,098	24"	2,460 31
Pasco st., I. O., extension south- erly.....	Clay	102	10"	47 49
Plainfield st., Orchard to Newland..	Brick	303	2'-6" x 3'-9" } egg shaped }	2,367 93
Plainfield st., Sargeant to Fulton, relaying.....	Clay	244 456 537 414	10' 12" 15" 18" }	2,525 13
Revere st., flush gate.....		....	....	23 32
Ridgewood terrace, flush gate.....		....	....	29 46
Sargeant st., apron for outlet.....		....	....	76 45
Sheldon st., west from North Main st.....	Clay	42	10"	43 87
Spruceland ave., east from Beech- wood st., relaying.....	Clay	242	8"	136 48
Stafford st., west from Armory st....	Clay	402	10"	210 53
Sumner ave., flush gate.....		....	....	48 25
Ventura st., north from Sumner ave.	Clay	351	10"	289 51
Wareham st., flush gate.....		....	....	21 24
Washington ave., catch basin.....		....	....	38 89
Wason ave., outlet.....	Brick	30	3'-10" x 5'-9" } egg shaped }	886 69
Wilmont st., east from Dickinson st.	Clay	349	18'	610 02
Worthington st., east from Autumn st. and west from Sackett's ave., relaying.....	Clay	98 231	12" 15" }	934 84
Yale st., Dartmouth to Princeton, relaying.....	Clay	233 359 350	15" 18" 24" }	1,770 13
		18,347		\$38,478 88

**NEW SEWER CONSTRUCTION.—CONTINUED.**  
**PIPE SEWER BUILT BY PRIVATE PARTIES.**

LOCATION.	Material.	Length in Feet.	Size.
Oak Grove ave., extension northerly.	Clay	256	12"

**SEWERS ABANDONED—1902.**

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Amherst st., at Harvard st.....	Cem.	25	12"	
Bay st., Florida to Pleasant.....	Cem.	234	12"	\$334 00
Buckingham st., Bay to Clarendon..	Cem.	650	12"	478 59
Clifton ave., southerly from Central st.	Clay	107	6"	
		108	8"	
Cornell st., westerly from Princeton st.	Clay	81	8"	82 91
East Court st., west from Dwight st..	Cem.	5	12"	4 80
Harvard st., Yale to Vassar .....	Cem.	616	12"	564 88
Madison ave., north from Central st.	Cem.	100	8"	64 21
		310	10"	
North Main st., Arch to Grove.....	Cem.	606	15"	2,119 84
	Cem.	538	18"	
	Clay	100	12"	
Oakland st., Belmont ave. to Dickinson st.....	Clay	94	8"	740 39
		299	10"	
		503	12"	
Plainfield st., Bradford st. to C.R.R.R.	Cem.	1,431	12"	1,032 39
Spruceland ave., east from Beechwood ave.....	Clay	242	8"	236 50
		225	12"	
Worthington st., near Autumn st....	Cem.	350	15"	555 06
Yale st., Dartmouth to Harvard ....	Cem.	842	12"	75 83
		7,466		\$6,296 58

SUMMARY.	Length in Feet.	Cost.
Brick sewers built by regular appropriation.....	518	\$3,342 30
Brick sewers built by special appropriation.....	131	5,307 70
Clay pipe sewers built by regular appropriation .....	17,698	28,096 86
Flush gates, manholes, catch basins, and outlets built by regular appropriation .....	....	1,732 12
	18,347	\$38,478 88
Clay pipe sewer built by private parties.....	256	
	18,603	
Sewers abandoned.....	7,466	
Net addition carried to sewer table.....	11,1	

## CLEANING AND REPAIRS.

sewers for which less than \$10.00 was expended are included  
 "Sundry Sewers."

ont avenue, . . . . .	\$105 41
street, . . . . .	73 89
nut street, . . . . .	10 24
street, . . . . .	140 62
nson street, . . . . .	11 87
street, . . . . .	218 60
t avenue, . . . . .	55 75
Pleasant avenue, . . . . .	33 20
n brook sewer, . . . . .	1,456 24
ry street, . . . . .	101 73
l avenue, . . . . .	51 15
l street, . . . . .	203 15
street, . . . . .	222 43
street, Indian Orchard, . . . . .	30 06
treet, Indian Orchard, . . . . .	19 57
rd street, . . . . .	38 43
r street, . . . . .	10 50
n street, . . . . .	18 36
ion street, . . . . .	166 54
y street, . . . . .	11 63
rd street, . . . . .	34 41
Main street, . . . . .	116 86
street, . . . . .	71 95
bridge street, . . . . .	39 95
er avenue, . . . . .	77 62
y sewers, cleaning connections, . . . . .	439 17
y sewers, flushing, . . . . .	2,451 34
y sewers, repairs, . . . . .	352 75
street, . . . . .	92 69
ninster street, . . . . .	10 56
street, . . . . .	82 29
	<hr/>
	\$6,748 98

## RECEIPTS.

## REGULAR APPROPRIATION.

From appropriation, . . . . .	\$40,000 00	
From entrance fees, . . . . .	8,388 03	
From other departments and private parties, . . . . .	1,568 41	
From Highways and Bridges, transferred, . . . . .	350 00	
		<u>\$50,306</u>

## EXPENDITURES.

## REGULAR APPROPRIATION.

Building and connecting private drains, . . . . .	\$2,145 24	
City teams, . . . . .	1,560 25	
City yard, . . . . .	772 59	
Cleaning and repairs, . . . . .	4,297 64	
Department and general expenses, . . . . .	2,058 56	
Flushing sewers, . . . . .	2,451 34	
Material on hand, . . . . .	166 97	
Services of City Engineer's assistants, . . . . .	425 31	
Sewer construction, . . . . .	33,171 18	
Supplies, . . . . .	168 02	
Tools, . . . . .	1,434 03	
Work and material for other departments, . . . . .	829 84	
Work and material for private parties, . . . . .	669 92	
		<u>\$50,150 89</u>
Amount unexpended, . . . . .	155 55	

## SPECIAL APPROPRIATIONS.

	Limit of Expenditure.	Expended prior to this year.	Expended since December 10, 1901.
Dickinson street,	\$44,552 01	\$42,363 97	\$2,188 14
Mill river valley,	52,300 00	48,474 09	3,119 56

# CITY OF SPRINGFIELD,

SEWER CONSTRUCTION TO DECEMBER 10, 1902.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., west from Fisk ave	301	15"	Clay	\$497.88
	275	12"	" }	
Acushnet ave., east from Main	294	20"	"	298.94
st .....	279	18"	" }	
	271	15"	" }	
	26	12"	" }	
Adams st., Town brook to Main	149	18"	"	\$322.22
st .....	890		Brick	66.68
east from Town brook....				388.90
Alden st., Hancock to East-	595	18"	Cem. }	1,529.54
ern ave .....	820	15"	" }	
Eastern ave., to Wilbraham	895	15"	Clay	911.39
ave.....				
easterly from Wilbraham	499	10"	"	250.86
ave .....				2,691.79
Alderman st., easterly from	296	18"	"	916.78
Dickinson st.....	304	15"	" }	
	300	12"	" }	
	137	10"	" }	
Alexander st., east from North st.	288	10"	"	188.48
Alfred st., east from Birnie ave.	377	10"	"	.....
Allen ave., easterly from Allen st	338	10"	"	205.36
Allen st., Mill river to Randall	902	24"	"	2,408.92
ave.....	383	18"	"	
	474	15"	"	1,598.59
	580	12"	" }	
extension easterly.....	1,603	12"	"	881.58
extension east to Plum Tree				
road.....	1,401	10"		984.62
Allendale st., east from North st	272	12"	"	5,873.71
	340	10"	" }	401.43
† Amaron st., south from State st	349	10"	"	222.90
Amherst st., north from Harvard	441	12"	Cem. }	74.90
	25	10"	Clay }	23.78
Princeton to Monmouth....	512	12"	Clay }	622.90
	191	10"	" }	721.58

† Renamed.



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Andrew st., north from Boston road.....	463 422 382	20" 18" 12"	Clay " } " }	\$1,753.67
Arbor st., Butler to Carew....	398	12"	"	318.05
Armory Hill sewer from Ar- mory st., through private grounds to Worthington..	150 900 249	2'-5" x 3'-7 $\frac{1}{2}$ " 2'-8" x 4'-0" 2'-1" x 3'-11 $\frac{1}{2}$ "	Brick " } " }	5,818.04
Armory st., north from Lib- erty.....	450 476	1'-10" x 2'-9" 1'-8" x 2'-6"	" } " }	\$2,439.42
north from brick sewer to Carew st.....	156 267 290	24" 20" 12"	Clay " } " }	975.77
north from culvert north of B. & A. R. R.....	690 860 271	15" 12" 10"	" } " } " }	1,165.47
south from Summer.....	374	12"	"	384.78
south from Worthington....	570	15"	Cem.	658.06
Ashley st.....	65 580 697	18" 15" 12"	" } " } " }	80.45 1,453.92 1,534.37
Auburn st.....	397 335	12" 10"	Clay " }	655.06
Autumn st., Summer to Worth- ington.....	239	15"	"	715.29
Bancroft st., Garden brook to Chestnut st.....	1361	3'-4" x 5'-0"	Brick	
including Chestnut st., Ban- croft to Montmorenci..	379	3'-2" x 4'-9"	"	8,914.04
Montmorenci st., east from Chestnut.....	43	3'-2" x 4'-9"	"	
Bay st., Bowles to Cambridge	1,037 360	2'-8" x 4'-0" 2'-2" x 3'-3"	" } " }	8,056.62
east from Cambridge.....	247	8"	Clay	46.75
Sherman to Clarendon.....	151	8"	Cem.	46.82
Florida to Sherman.....	304 377 812	20" 18" 15"	Clay " } " }	1,092.89 945.16 321.02
Florida to Pleasant.....	235	12"	"	
St. James ave. to Pleasant..	250 245 228	15" 12" 10"	" } " } " }	715.01
Catharine to Clarendon ....	194	10"	"	200.4

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	\$119.21
east from Colton.....	124	8"	"	3.65
Beaudry st., I. O.....	300	12"	"	\$122.86
southerly from Main st....	270	10"	"	745.95
Beaumont st., north from Bel- mont ave.....	250	12"	Clay	403.87
	431	10"	"	
Beech st., north from Cen- tral.....	410	10"	Cem.	74.20
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade pl., west fr. Walnut st.	220	8"	"	.....
	140	6"	"	
Bellevue ave., easterly from Belmont ave.....	300	18"	"	.....
	300	15"	"	
	194	12"	"	
westerly from Dickinson st.	744	10"	"	.....
Belmont ave., Mill river to brick sewer.....	954	20"	"	4,150.20
east from end of brick sewer to Kenwood Park.....	432	20"	"	
	493	18"	"	
extension to Sumner ave...	301	15"	"	842.40
	403	12"	"	
	616	10"	"	
southerly from Sumner ave..	830	3'-4"x-5'-0"	Brick	8,179.57
	819	3'-0"x-4'-6"	"	93.92
east from Fort Pleasant ave. from top of hill to just east of Litchfield st.....	90	10"	Clay	
	660	2'-0"x3'-0"	Brick	
	445	1'-10"x2'-9"	"	
	595	1'-8"x2'-6"	"	
	550	1'-6"x2'-3"	"	25,016.28
Belmont court.....	216	10"	Clay	146.76
Benton st., south from State..	301	12"	"	518.96
	300	10"	"	
	247	8"	"	
extension southerly.....	320	8"	"	
Berkeley st., Princeton to Mon- mouth.....	483	12"	"	933.64
Berkshire st., I. O., Oak to Myrtle.....	701	12"	Cem.	517.22
east from Chestnut.....	577	12"	Clay	946.21
				545.74
Besse place, west from Main st.	390	10"	"	1,491.95
				.....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Birnie ave., north from Worcester st., sewer extension to Grace st.....	162	15"	Cem.	...
south from Worcester st., sewer extension to Walter st.....	144	12"	"	....
north from Wason ave....	362	24"	Clay	\$579.11
south from Wason ave....	350	18"	"	1,024.75
	417	15"	"	
north from Arch st.....	1,048	24"	"	....
north from Douglas st.....	292	24"	"	1,149.93
	303	20"	"	
	304	15"	"	
	144	10"	"	
Bliss st., from Main to N. Y., N. H. & H. R. R.....	1,284	12"	Cem.	\$2,753.79
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).....	203	12"	"	1,150.71
Bond st., east from Garden brook sewer .....	341	2'-0" x 3'-0"	Brick	....
end of brick sewer to Chestnut st.....	959	24"	Clay	1,580.25
				2,195.84
				3,776.09
Bowdoin st., south from Worthington .....	673	15"	Cem.	740.00
Worthington to Ingersoll grove	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight east and north from Catharine	752	15"	"	1,058.67
	250	12"	Clay	50.82
	275	8"	"	
				1,109.49
Boylston st.....	610	18"	Cem.	1,638.72
	346	15"	"	
Brace st., north from Belmont ave .....	137	10"	Clay	....
Bradford st .....	352	15"	Cem.	1,801.99
	758	12"	"	
Bridge st., west of Main.....	798	12"	"	718.79
	275	15"	Clay	429.14
Main to Chestnut.....	1,158	2'-0" x 3'-0"	Brick	5,414.20
				6,562.13
Broad st.....	970	15"	Cem.	1,240.73
Brookline ave., east from North st.....	328	12"	Clay	29.57
	171	10"	"	
Brown st., Yale to Bay.....	483	10"	Cem.	
	21	8"	"	327.51

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Buckingham place, east from Buckingham st.....	235	10"	Clay	\$168.97
Buckingham st., Bay to Clarendon .....	651	12"	"	\$597.24
south from Bay.....	35	12"	Cem.	
State to Bay .....	305	18"	Clay	1,158.40
	345	15"	"	
	675	12"	"	1,755.64
Burr st., east from Andrew....	570	12"	Clay	417.88
Butler st., Chestnut to Cass..	1,268	20"	"	2,021.96
easterly from Cass.....	321	20"	"	520.71
				2,542.67
Calhoun st., North Main to North .....	853	12"	"	631.40
east from North.....	300	8"	"	227.19
				858.59
Cambridge st., south from Bay	276	20"	"	1,100.88
	331	18"	"	
	266	15"	"	
	302	12"	"	
	278	10"	"	396.35
				1,497.23
Card-factory pond .....	751	12"	Cem.	408.75
in front of new High school	492	24"	Clay	848.26
				1,257.01
Carew st. ....	580	18"	Cem.	671.51
east from 18" pipe.....	200	12"	"	153.28
east from Garden brook to Prospect st .....	1,456	4'-3" cir.	Brick	21,913.22
	1,257	3'-0" cir.	"	
	791	2'-8" cir.	"	
Cass st., south from Linden..	596	15"	Clay	892.07
north from Linden .....	224	12"	"	
Liberty to Franklin.....	500	12"	"	457.99
	163	10"	"	
Catharine st., Dartmouth to McKnight... ..	833	2'-0" x 3'-0"	Brick	4,428.92
State to McKnight .....	348	15"	Clay	1,348.95
	438	12"	"	
	333	10"	"	
				5,777.87
Cedar st., Pine to Walnut... ..	180	3'-10" x 5'-9"	Brick	889.35
	1,074	3'-8" x 5'-6"	"	6,206.73
west from Pine.....	378	12"	Cem.	288.32
				7,384.40
Cedar st., I. O., Main st. to river.....	433	2'-0" x 3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	198.76
				2,200.20

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Central st., east from Main....	99	15"	Cem.	\$147.60
east from 15" pipe.....	546	12"	"	385.49
Main to Maple .....	527	2'-0"x3'-0"	Brick	2,520.66
	700	1'-8"x2'-6"	"	
	225	18"	Cem.	559.00
Maple st. to top of Sterns Hill	480	1'-6"	Brick	
	520	18"	Cem.	481.38
west from Pine st.....	500	12"	"	
Pine to Mill river.....	645	18"	"	2,044.52
	866	15"	"	
	339	12"	"	514.05
	335	12"	Clay	
	310	10"	"	\$6,652.70
Central st. ave., Knox to Cen- tral st. ....	279	10"	Cem.	197.64
	285	12"	"	44.07
				241.71
Center st., I. O., Oak to Pine..	463	12"	"	454.31
Chapel st.....	400	10"	Clay	208.13
Chapin st., north from State..	349	15"	"	746.99
	359	12"	"	
Chase ave., east from Fort Pleasant ave.....	238	12"	"	24.49
	333	10"	"	
Charles st., north from Liberty	654	12"	"	576.40
south from Liberty.....	29	12"	"	12.94
				589.34
Charter ave .....	527	12"	"	475.20
Cherrellyn ave.....	300	15"	"	410.62
Cherry lane, Mill river to Cen- tral street.....	398	18"	"	1,454.15
	434	15"	"	
	251	12"	"	
	295	10"	"	
Cherryvale ave., east and west from Long Hill st.....	596	10"	"	15.74
Chester st., Hancock to Central	330	8"	"	
Chestnut st., south from Edwards	575	12"	Cem.	579.02
south from Mattoon.....	288	15"	"	319.69
Mattoon to Pearl.....	313	16"x24"	Brick	445.40
Pearl to Bridge.....	143	1'-8"x2'-6"	"	599.51
Bridge to Worthington....	480	2'-0"	"	
Worthington to Taylor....	60	18"	Cem.	291.17
	244	12"	"	
Lyman st. to B. & A. R. R..	134	18"	"	355.41
	72	12"	"	
south from Franklin.....	500	12"	"	358.7
north from Franklin.....	397	12"	"	294.1

## SEWER CONSTRUCTION.—CONTINUED.

OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Essex to Everett.	374	15"	Cem.	\$586.72
Prospect.....	424	24"	Clay	1,618.64
	537	20"	"	
Prospect.. ....	313	18"	Cem.	
Montmorenci...	391	15"	"	406.00
Bancroft.....	299	12"	"	535.24
Prospect.....	220	12"	"	213.18
Montmorenci...	185	12"	"	178.88
	717	12"	Clay	252.23
Eagle st.....	87	15"	"	807.01
Merwin st.....	178	10"	"	....
Eagle st.....	171	10"	"	....
sewer see Bancroft				\$7,840.99
I. O., Worcester				
penden.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
o Berkshire....	307	15"	"	342.65
.....	556	18"	"	738.16
.....	80	15"	Cem.	1,398.71
				157.23
				1,555.94
Sumner ave. to				
st.....	580	12"	Clay	84.12
	55	8"	"	6.89
				91.01
, Worthington to				
s ave.....	336	18"	Cem.	1,678.74
ave. to Sherman			"	
.....	885	12"	"	
Worthington....	205	10"	Clay	225.80
.....	398	15"	"	1,904.54
.....	253	12"	"	696.54
, east from Ar-				
.....	274	18"	"	790.48
	250	15"	"	
	276	12"	"	
	284	10"	"	
north from Bay..	250	12"	"	319.95
	119	10"	"	
outh from Central				
.....	406	8"	"	82.10
re., south from				
ave.....	464	10"	"	....
.....	410	12"	Cem.	441.52

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Clinton st., Conn. river to Ful- ton st.....	593	7'-3" x 4'-10"	Brick	\$26,137.87
including Fulton st. from Clinton to Sargeant.....	1,080	7'-0" x 4'-8"	"	
	42	7'-3" x 4'-10"	"	
Sargeant st.....	920	6'-9" x 4'-6"	"	
Carew st., west from Garden brook .....	250	6'-9" x 4'-6"	"	2,207.90
connection with Garden brook .....	32	5'-0"	"	
submerged outlet .....		24"	Wood	
		24"	C.Ir'n	
				\$28,787.29
College ave., State st. to Shat- tuck ave .....	839	12"	Clay	139.62
north from Shattuck ave.....	175	12"	"	....
College st., State st. to Wilbra- ham road .....	34	12"	"	139.62
	443	10"	"	349.99
Collins st., east from Eastern ave.....	300	12"	"	457.61
	269	10"	"	
Colonial ave., south from State.....	326	12"	"	....
	348	10"	"	
Colton st., Wilbraham road to Beacon st.....	448	18"	"	1,822.22
	569	15"	"	
	658	12"	"	
Columbia terrace, north and east from Liberty st.....	498	10"	"	....
Columbus ave., north from Park ave.....	307	10"	"	....
Commonwealth ave., Belmont ave. to Washington street..	441	24"	"	2,372.62
	500	20"	"	
	549	18"	"	
	1,255	15"	Cem.	
Congress st.....	221	12"	"	1,812.17
	76	10"	"	
Continental ave., south from Sumner ave.....	215	12"	Clay	
	202	10"	"	
Cook's ave., Worthington st. to N. Church ave.....	117	15"	Cem.	
south from N. Church ave. (includes cost of N. Church ave.) .....	69	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cornell st Dartmouth terrace to Wellesley st.....	185	15"	Clay	\$543.05
	374	12"	"	
north from Wellesley street	186	10"	"	208 20
westerly from Princeton....	52	10"	Cem.	47.30
	86	8"	Clay	88.04
easterly from Princeton....	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				\$1,136.84
Court st., east from Water....	273	12"	Cem.	226.15
west from City Hall... ..	431	12"	"	553.45
Main st. to City Hall .....	200	12"	"	309.67
				1,089.27
Courtland st., north from State.	164	15"	Clay	}
	621	12"	"	
Crosby st., west from Walnut st.	321	10"	"	231 38
Cross st., east from Willow...	363	12"	Cem.	311.56
Main to Willow .....	388	18"	Clay	878.12
Crystal ave., east from Belmont ave.....	251	15"	"	1,189.68
	250	12"	"	}
	298	10"	"	
Cypress st., from Conn. river to Garden brook in Ferry st .....	1,466	3'-4"x5'-0"	Brick	13,629.85
Cypress ave.....	360	12"	Clay	484.08
Dale st., north from sewer, south from Hubbard ave..	203	10"	"	157.30
south from Winthrop.....	46	8"	"	13.08
				170.38
Dartmouth st., St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick	}
Yale to Bowles.....	295	2'-6"x3'-9"	"	
Dartmouth terrace, Worthing- ton st. to Cornell.....	499	20"	Clay	}
	357	18"	"	
	177	15"	"	
Dawes st., south from Bay....	229	15"	"	}
	380	12"	"	
	518	10"	"	
	350	10"	"	165.40
Dawson ave., west from White.				95.87
Demond ave., west from Fisk ave.....	510	12"	"	}
east from Plainfield st.....	403	12"	"	
Dexter st., Knox to Pine....	558	12"	Cem.	60.83
	226	10"	Clay	245.10
				306.93



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dickinson st., Mill st. to Sumner ave.....	35	4'-6" cir.	Brick	\$44,552.11
	60	5' 0"x2' 1'	"	
	251	5' 0" cir.	"	
	679	4' 0" cir.	"	
	460	4'-10"x7'-3"	"	
	869	4'-8"x7'-0"	"	
	1,040	4'-4"x6'-6"	"	8,760.53
	996	4'-2"x6'-8"	"	
† south from Sumner ave....	1,379	2' 6"x3' 9"	"	
	324	2' 4"x3' 6"	"	
	434	2' 0"x3' 0"	"	
	312	1'-10"x2'-9"	"	
				<u>\$53,312.64</u>
Donald st., east from Birnie ave.....	315	10"	Clay	....
Dorchester st., St. James ave. to Amherst st.....	364	12"	"	359.50
	238	10"	"	
Douglas st. extension.				
North Main to Chestnut....	424	4'-6"	Brick	4,905.19
	442	4'-0"	"	
Douglas st. (see Rowland ave.)	....	....	....	....
Dresden ave., south from State st.....	359	12"	Clay	25.14
	321	10"	"	
Dwight st., north from Harrison ave.....	100	15"	Cem.	144.41
north from Worthington....	342	12"	"	374.73
south from Worthington....	269	12"	Clay	2,520.71
south from Hillman.....	226	10"	"	
north from Hillman.....	103	10"	"	
north from Sanford.....	253	20"	"	
	229	18"	"	
	199	15"	"	
south from Sanford.....	258	2'-8"x4'-0"	Brick	1,571.86
				<u>4,611.71</u>
Dymon st.....	415	12"	Cem.	385.00
Eagle st., North Main to Chestnut.....	643	15"	Clay	....
East Court st., west from Dwight	206	12"	"	385.00
	62	10"	"	
Eastern ave., north from Monroe st.....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
south from Monroe st.....	28	12"	Cem.	45.00
	210	12"	Clay	147.90
north from Lebanon st....	194	12"	Cem.	381.17

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eastern ave., Lebanon to Olive st .....	159	12"	Cem.	\$190.96
south from Olive st .....	169	8"	Clay	119.57
Greene to Ladd .....	38	15"	"	27.25
south from Greene .....	125	8"	"	69.58
north from King st .....	152	10"	Cem.	166.50
.....	101	10"	Clay	149.70
north from Pendleton ave..	312	12"	Cem.	190.38
north from Tyler st .....	286	12"	"	181.30
north from Quincy st .....	118	10"	"	131.15
Watershop pond to Man- hattan st .....	1,164	24"	Clay	2,089.43
Manhattan to Alden st ..	338	20"	"	636.21
Alden to Collins st. ....	231	12"	"	313.99
				<hr/> \$4,932.84
East William st. (see William st)	....	12"	Cem.	
Edwards st .....	551	12"	"	404.88
Elliott st., into and through Salem and 290 feet in Salem .....	283	18"	"	
.....	709	15"	"	
.....	538	12"	"	1,844.28
Elm st., Conn. river to Water st .....	385	3'-9" x 3'-9"	Brick	29.70
Water st. to Main .....	996	3'-8" x 5'-6"	"	10,714.49
submerged outlet .....	191	24"	Wood	1,700.79
.....	26	24"	C. Iron	359.80
				<hr/> 12,804.78
Elmwood st., Main to Han- over .....	300	18"	Clay	
.....	249	15"	"	
.....	50	12"	"	707.66
Emery st .....	542	12"	Cem.	579.58
Essex st., west from Garden brook .....	418	15"	"	355.00
Garden brook to Chestnut..	1,115	2'-2" x 3'-3"	Brick	7,105.10
.....	204	18"	Cem.	355.33
				<hr/> 7,815.48
Essex st., I. O., west from Oak	254	12"	Clay	
.....	145	10"	"	424.89
extension to Myrtle st .....	281	10"	"	210.09
				<hr/> 634.98
Everett st., Chestnut to brook west from Cass .....	328	15"	"	308.39
.....	926	15"	"	821.43
east from Cass .....	....	....	....	104.35
				<hr/> 1,284.17

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Euclid ave., Belmont ave. to Dickinson st.....	389	12"	Clay	\$1,102.00
	741	10"	"	
north from Dickinson st....	77	8"	"	
				50.67
				\$1,152.67
Fairfield st., west from Litch- field.....	380	12"	"	....
north and west from Gar- field.....	556	10"	"	351.64
				351.64
Federal st., Worthington to Pearl .....	567	12"	Cem.	740.92
south from Summer.....	274	10"	Clay	172.00
				912.92
Ferry st., Main to Garden brook (see Cypress st.).....	....		....	....
Garden brook to Chestnut st	1,168	2'-4"x3'-6"	Brick	5,377.81
				5,377.81
Firglade ave., Sumner to Spruceland .....	350	10"	Clay	46.01
	270	8"	"	
Spruceland to Pineywoods ave.....	447	10"	"	
		8"	"	....
				46.01
Fisk ave., Rowland to Worces- ter.....	272	24"	"	1,073.11
	275	20"	"	
	298	10"	"	
south from Wason.....	299	24"	"	1,216.81
	294	20"	"	
	248	12"	"	
				2,289.92
Florence st., east from Pine... east from Hancock .....	824	15"	Cem.	2,068.95
	651	12"	"	
	283	10"	"	
				303.15
				2,372.10
Florentine Gardens, north from Pineywoods ave.....	421	10"	Clay	....
Florida st., Worthington to St. James ave.....	935	2'-2"x3'-3"	Brick	4,499.10
St. James ave. to Bay st....	599	24"	Clay	1,832.21
Worthington to Ingersoll grove .....	273	15"	"	359.06
	561	12"	"	523.88
				7,214.25
Forest st., Belmont ave. to Forest Park ave.....	419	12"	"	
	255	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eastern ave., Lebanon to Olive st.....	159	12"	Cem.	\$190.96
south from Olive st.....	169	8"	Clay	119.57
Greene to Ladd.....	38	15"	"	27.25
south from Greene.....	125	8"	"	69.58
north from King st.....	152	10"	Cem.	166.50
.....	101	10"	Clay	149.70
north from Pendleton ave..	312	12"	Cem.	190.38
north from Tyler st.....	286	12"	"	181.30
north from Quincy st.....	118	10"	"	131.15
Watershop pond to Man- hattan st.....	1,164	24"	Clay	2,089.43
Manhattan to Alden st..	338	20"	"	636.21
Alden to Collins st. ....	231	12"	"	313.99
				<u>\$1,932.84</u>
East William st. (see William st)	....	12"	Cem.	
Edwards st.....	551	12"	"	404.88
Elliott st., into and through Salem and 290 feet in Salem.....	283	18"	"	1,844.28
.....	709	15"	"	
.....	533	12"	"	
Elm st., Conn. river to Water st.....	385	3'-9" x 3'-9"	Brick	29.70
Water st. to Main.....	996	3'-8" x 5'-6"	"	10,714.49
submerged outlet.....	191	24"	Wood	1,700.79
.....	26	24"	C. Iron	359.80
				<u>12,804.78</u>
Elmwood st., Main to Han- over.....	300	18"	Clay	707.66
.....	249	15"	"	
.....	50	12"	"	
Emery st.....	542	12"	Cem.	579.58
Emery st., west from Garden brook.....	418	15"	"	355.00
Garden brook to Chestnut..	1,115	2'-2" x 3'-3"	Brick	7,105.10
.....	204	18"	Cem.	355.33
				<u>7,815.48</u>
Emery st., I. O., west from Oak	254	12"	Clay	424.89
.....	145	10"	"	
extension to Myrtle st.....	281	10"	"	210.09
				<u>634.98</u>
Emery st., Chestnut to brook	323	15"	"	308.39
west from Cass.....	926	15"	"	821.43
cut from Cass.....	....	....	....	104.35
				<u>1,284.17</u>

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Garfield st., east from Park ave	556	15"	Clay	\$967.16
	514	12"	"	
west from Belmont ave.....	531	10"	"	
				329.87
				\$1,297.03
George st., south from Dexter	409	10"	"	332.45
Girard ave., Bay st. to Mc-				
Knight.....	947	12"	"	711.13
Grace st., east from Birnie ave	274	15"	Cem.	51.56
Grand ave., east from Reverest.	250	15"	Clay	....
	252	12"	"	
west from Revere st.....	151	10"	"	
				....
Grant st .....	588	12"	Cem.	439.33
Granville st., Eastern ave. to				
Logan st.....	495	12"	"	519.03
Gray's ave.....	495	12"	"	421.06
Greene st., Hancock to East-				
ern ave.....	610	18"	"	1,754.35
	793	15"	"	
Greenleaf st., Sumner ave. to				
Garfield st .....	527	12"	Clay	133.69
Greenwood st., Main to Garden				
brook .....	386	12"	Cem.	2,231.69
east from Garden brook....	538	15"	Clay	
east from 15" pipe .....	113	12"	"	
	452	12"	Cem.	
Grosvenor st.....	131	18"	"	686.55
	648	15"	"	
Grove st., west from North...	679	10"	Clay	442.05
Grover st., east from Armory st.	300	18"	"	898.00
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dick-				
inson st.....	500	12"	"	817.51
	474	10"	"	
Hampden st.....	569	15"	Cem.	711.00
Hampden st., I. O.....	459	12"	"	301.26
Hampshire st., I. Q., east from				
Oak.....	250	12"	"	206.20
west from Oak.....	300	12"	Clay	633.59
	398	10"	"	
				196.76
west from Myrtle st.....	300	10"	"	1,036.51
Hancock ave., west from Han-				
cock st. ....	520	10"	"	5

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Forest Park ave., north from Sumner ave. ....	567	12"	Clay	\$123.15
south from Sumner ave. ....	500	10"	"	....
east from Fort Pleasant ave. ....	1,081	24"	"	....
extension to Garfield st. ....	325	20"	"	1,217.48
	562	18"	"	
north from Pineywoods ave. ....	380	10"	"	33.87
				<u>\$1,374.50</u>
Fort st., Main to Water ....	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave. ....	888	2'-4" x 3'-6"	Brick	13,293.38
	1,825	2'-0" x 3'-0"	"	
south from Mill st. ....	428	12"	Clay	293.42
				<u>13,586.80</u>
Franklin st., west from Garden brook sewer. ....	434	18"	Cem.	....
east from Garden brook sewer. ....	469	18"	"	1,834.76
	735	15"	"	
Chestnut to Charles. ....	273	15"	Clay	303.37
east from Charles. ....	670	12"	"	471.99
west from Nursery. ....	207	15"	"	91.55
east from Nursery. ....	98	15"	"	
	566	15"	Cem.	....
				<u>2,701.67</u>
Premont st., Main to Water. ....	780	....	Brick	702.45
west from Main. ....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				<u>1,424.25</u>
Fulton st., Cypress to Clinton	882	12"	Cem.	826.66
north from Clinton. ....	829	15"	"	1,138.56
north from John. ....	314	12"	Clay	674.48
	401	10"	"	
				<u>2,639.70</u>
Gardner ave., north from Gard- ner st. ....	151	8"	"	73.11
Gardner st. ....	655	2'-0" x 3'-0"	Brick	1,995.23
	400	12"	Cem.	518.97
				<u>2,514.20</u>
Garden brook sewer, north from Liberty st. to C. R. R. R. ....	2,936	5'-6", cir.	Brick	47,577.34
	766	5'-0", cir.	"	
	1,303	4'-6", cir.	"	
	236	3'-0" x 4'-6"	"	
Worthington st., easterly to Armory st. ....	3,274	4'-6-10', cir.	"	29,761.32
	952	4'-1", cir.	"	
				<u>77,338.66</u>

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Highland st., south from Allen	625	18"	Clay	\$1,428.06
	304	15"	"	
	193	12"	"	
	404	10"	"	
Hillman st., Main to Dwight..	350	15"	"	1,436.30
	380	12"	"	
Hillside place, east from Rich- elieu st .....	106	8"	"	....
Holyoke st.....	784	12"	Cem.	928.06
Homer st., south from State..	31	12"	Clay	31.56
	370	10"	"	
Hooker st., east from North Main .....	444	10"	Cem.	\$39.04
extension to North st .....	255	10"	Clay	....
				39.04
Howard st., west from Water	350	12"	Cem.	364.47
east from Water .....	312	12"	"	289.14
west from Main.....	344	15"	Clay	799.34
	321	12"	"	
				1,452.95
Hubbard ave., east from Main st .....	257	15"	"	630.47
	321	12"	"	
Hunt terrace, north from Allen st .....	279	12"	"	....
Ingersoll grove, north from Worthington st.....	782	12"	Cem.	1,003.05
	218	8"	Clay	
east from Bowdoin st . . . .	132	10"	"	106.53
† Jackson st., south from Sum- ner ave.....	460	10"	"	1,109.58
	140	8"	"	
north from Pineywoods ave	281	10"	"	....
				56.78
James st .....	289	15"	Cem.	924.38
	534	12"	"	
Jefferson ave., North Main st. to Chestnut .....	414	12"	"	492.50
	299	20"	Clay	1,663.86
	299	18"	"	
	276	15"	"	
	60	12"	"	
	78	6"	"	37.89
rear of south side.....	518	12"	Cem.	364.84
				2,559.09
John st.....	652	12"	"	283.84
Johnson st. east from Dickin- son st .....	496	18"	Clay	

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Keith st., Belmont ave. to Dickinson st.....	551 551	12" 10"	Clay " }	\$1,018.18
Kenwood Park, north from Belmont ave .....	130 1,127	12" 10"	" " }	139.96
Kibbe ave., Summer st. to Worthington st.....	260	18"	"	552.92
King st., Walnut to Hancock	504 441	15" 12"	Cem. " }	\$921.37
Hancock to Eastern ave...	710 686	18" 15"	" " }	1,715.69
Eastern ave. to Logan st....	405 72	12" 10"	" Clay }	72.72
Knox st., Mill river to Wind- sor st.....	1,115 198	15" 12"	" " }	2,709.78 116.18
Ladd st., Eastern ave. to Logan st ..	243 304	15" 12"	Clay " }	424.92
Lafayette st., St. James ave. to Amherst st .....	582 21	12" 10"	" " }	514.86
Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay }	2,088.10 282.48 2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	....
Lebanon st. (see Hancock)...	....	3'-6"x5'-3"	Brick	....
west from Hancock.....	158	2'-0"x3'-0"	"	1,495.77
Hancock to Eastern ave ...	606 816	18" 15"	Cem. " }	1,701.28
Lenox st.....	465	10"	Clay	3,197.05 32.91
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	516.31
Leyfred ter., north from Bel- mont ave.....	300 317	18" 15"	Clay " }	957.30
Liberty st., west from Garden brook.....	70 290	.... 12"	Brick Cem. }	
Garden brook to Chestnut st.....	967 171	15" 8"	" " }	1,124.84
Chestnut to Webster .....	784 659 684	2'-4"x3'-6" 1'-10"x2'-9" 2'-2"x3'-3"	Brick " " }	9,123.49



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Highland st., south from Allen	625	18"	Clay	\$1,428.06
	304	15"	"	
	193	12"	"	
	404	10"	"	
Hillman st., Main to Dwight..	350	15"	"	1,436.30
	380	12"	"	
Hillside place, east from Rich- elieu st .....	106	8"	"	....
Holyoke st.....	734	12"	Cem.	928.06
Homer st., south from State..	31	12"	Clay	31.56
	370	10"	"	
Hooker st., east from North				
Main .....	444	10"	Cem.	\$39.04
extension to North st .....	255	10"	Clay	....
				39.04
Howard st., west from Water	350	12"	Cem.	364.47
east from Water .....	312	12"	"	289.14
west from Main.....	344	15"	Clay	799.34
	321	12"	"	
				1,452.95
Hubbard ave., east from Main				
st .....	257	15"	"	630.47
	321	12"	"	
Hunt terrace, north from				
Allen st .....	279	12"	"	....
Ingersoll grove, north from				
Worthington st.....	782	12"	Cem.	1,003.05
	218	8"	Clay	
east from Bowdoin st ..	132	10"	"	106.53
† Jackson st., south from Sum- ner ave.....	460	10"	"	1,109.58
	140	8"	"	
north from Pineywoods ave	281	10"	"	....
				56.78
James st .....	289	15"	Cem.	924.38
	534	12"	"	
Jefferson ave., North Main st. to Chestnut .....	414	12"	"	492.50
	299	20"	Clay	1,663.86
	299	18"	"	
	276	15"	"	
	60	12"	"	
	78	6"	"	37.89
rear of south side.....	518	12"	Cem.	364.84
				2,559.09
John st.....	652	12"	"	383.84
Johnson st. east from Dickin- son st .....	496	18"	Clay	

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Keith st., Belmont ave. to Dickinson st.....	551 551	12" 10"	Clay " }	\$1,018.18
Kenwood Park, north from Belmont ave .....	130 1,127	12" 10"	" " }	139.96
Kibbe ave., Summer st. to Worthington st.....	260	18"	"	552.92
King st., Walnut to Hancock	504 441	15" 12"	Cem. " }	\$921.37
Hancock to Eastern ave....	710 686	18" 15"	" " }	1,715.69
Eastern ave. to Logan st....	405 72	12" 10"	" Clay }	72.72
Knox st., Mill river to Wind- sor st.....	1,115 198	15" 12"	" " }	2,709.78 116.18
Ladd st., Eastern ave. to Logan st .....	243 304	15" 12"	Clay " }	424.92
Lafayette st., St. James ave. to Amherst st .....	582 21	12" 10"	" " }	514.86
Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay }	2,088.10 282.48 2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	....
Lebanon st. (see Hancock)...	....	3'-6"x5'-3"	Brick	....
west from Hancock .....	158	2'-0"x3'-0"	"	1,495.77
Hancock to Eastern ave ...	606 816	18" 15"	Cem. " }	1,701.28
Lenox st.....	465	10"	Clay	3,197.05 32.91
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	516.31
Leyfred ter., north from Bel- mont ave.....	300 317	18" 15"	Clay " }	957.30
Liberty st., west from Garden brook.....	70 290	.... 12"	Brick Cem.	
Garden brook to Chestnut st.....	967 171	15" 8"	" " }	1,124.84
Chestnut to Webster .....	784 659 684	2'-4"x3'-6" 1'-10"x2'-9" 2'-2"x3'-3"	Brick " " }	9,123.49

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Liberty st., Webster to Armory.	366	3'-0" x 4'-6"	Brick	\$5,383.15
	1,282	2'-2" x 3'-3"	"	
	317	1'-10" x 2'-9"	"	
	449	2'-2" x 3'-3"	"	
north from Armory .....	1,194	24"	Clay	3,126.87
	616	18"	"	
Lillian st., east from Oak .....	297	12"	"	\$21,297.66
Lincoln st., west from Magazine st .....	823	12"	"	232.47
Linden st .....	470	18"	"	876.54
	862	15"	"	1,254.55
Litchfield st., north from Garfield	69	6"	"	
Belmont ave. to Fairfield st.	159	15"	"	7.10
				335.11
Locust st., York to Mill .....	84	3'-0" x 4'-6"	Brick	342.21
	364	2'-9" x 4'-11"	"	
	686	2'-6" x 3'-9"	"	
Logan st., north from Ladd..	88	10"	Clay	67.64
north from Granville .....	200	10"	"	147.48
				215.12
Lombard st .....	500	12"	Cem.	344.69
Long Hill st. and Washington ave., extension east from pipe .....	650	2'-4" x 3'-6"	Brick	6,969.65
	823	2'-2" x 3'-3"	"	
Long Hill st., west from Wash- ington ave .....	399	15"	Clay	953.28
	185	12"	"	
	487	10"	"	
south from Sumner ave.	356	8"	"	324.90
south from Warner pl .....	423	10"	"	379.51
east from Conn. river .....	1,310	24"	"	2,086.09
submerged outlet .....	26	18"	"	5,387.70
	290	18"	Wood	
	28	18"	C. I.	
	650	12"	Cem.	
Loring st .....				16,101.13
Lowell st., dike to Plainfield st .....	305	18"	Clay	986.21
	396	15"	"	
	396	12"	"	
	283	10"	"	
Lyman st .....	1,335	2'-0" x 3'-0"	Brick	6,113.12
	720	15"	Cem.	1,655.26
				7,768.38
Lyons st., I. O., south from Main st .....	261	18"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Madison ave., north from Cen- tral st.....	250	12"	Clay	\$737.57
	287	10"	"	
Magazine st.....	682	18"	"	1,103.19
	249	15"	"	
Magnolia terrace, east side, Sumner ave. to Spruceland	586	8"	"	95.64
south from Spruceland....	90	8"	"	
west side, Sumner ave. to Spruceland .....	622	8"	"	
north from Washington ave.	362	24"	"	
	602	12"	"	....
overflow connection between east and west side.....	62	8"	"	26.00
Main st., including cost of parts in Carew and Franklin..	523	12"	Cem.	\$944.47
south from Sargeant st....	341	24"	Clay	2,539.81
	442	20"	"	
	480	18"	"	
	186	15"	"	
south from Locust .....	800	15"	"	1,354.55
York to B. & A. R. R. ....	56	7'-0", cir.	Brick	20,812.99
	1,772	6'-6", cir.	"	
	906	5'-6", cir.	"	
	990	5'-0", cir.	"	
	1,624	3'-4" x 5'-0"	"	
	864	2'-4" x 3'-6"	"	
	263	12"	Clay	164.82
Main st., I. O.....	2,321	2'-4" x 3'-6"	Brick	60,270.20
	500	18"	Cem.	7,636.81
	185	15"	"	
	103	12"	Clay	128.49
Cedar to Lyons st.....	1,110	2'-0" x 3'-0"	Brick	5,024.19
east from Lyons st.....	205	24"	Clay	1,334.58
	245	18"	"	
	129	12"	"	14,961.78
Malden st., south from Al- len.....	542	15"	"	....
	291	12"	"	
	494	10"	"	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	"	826.79
	645	12"	"	
	205	10"	"	
Maple st., Park to High.....	274	18"	Cem.	294.91
south from Union .....	515	18"	"	959.13
	185	12"	"	

## SEWER CONSTRUCTION,—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Maple st., north from Pine....	195	15"	Cem. }	\$1,421.68
	850	12"	" }	
south from Temple.....	....	....	"	51.55
Mapledell st., north from State	337	15"	Clay }	\$2,727.27
	300	12"	" }	70.80
	346	10"	" }	
Maplewood terrace, east from Fort Pleasant ave.....	682	15"	" }	....
	329	12"	" }	
	178	10"	" }	
Marble st.....	222	18"	Cem. }	
	586	15"	" }	1,178.97
	242	12"	" }	
Marengo ave., east from Bel- mont ave.....	443	15"	Clay }	
	612	12"	" }	
	778	10"	" }	
Margaret st., west from Water	520	12"	Cem.	507.30
east from Water.....	858	12"	"	801.44
				1,308.74
Marion st., south from Bay...	833	12"	Clay	795.45
east from Chapin.....	94	10"	" }	
	319	8"	" }	25.89
				821.34
Market st.....	147	....	Brick }	
	633	15"	Cem. }	1,066.36
	123	12"	" }	
	119	10"	Clay	....
				1,066.36
Massachusetts ave., south from Wilbraham road .....	300	15"	" }	
	300	12"	" }	953.65
	227	10"	" }	
Massasoit place, east from Massasoit st.....	381	12"	Clay	
Massasoit st., north from Carew	709	12"	Cem.	547.51
south from Lexington ave.	300	12"	Clay }	
	250	10"	" }	258.56
south from Montmorenci...	233	10"	"	168.93
north from Montmorenci ...	152	10"	"	92.94
				1,067.94
Mattoon st.....	356	16"x 24"	Brick }	
	87	15"	Cem. }	688.60
Maynard st., State st. to Shattuck ave.....	431	15"	Clay }	
	400	12"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
McKnight st., Catharine to Sherman.....	255	15"	Cem.	\$421.42
	30	15"	Clay	56.78
Catharine to Bowles.....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles to Girard ave.....	119	12"	Cem.	81.85
	263	10"	Clay	233.51
				\$936.15
Mechanic st.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
				231.73
Melrose st., Marshall place and Cottage ave.....	263	15"	"	1,345.66
	74	12"	"	
	772	10"	"	
	592	8"	"	
Merrick ave., south from King st	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut .....	774	15"	Clay	....
Mill river intercepting sewer				
Mill river to Locust st. ....	370	5'-3"	Brick	6,066.64
	691	4'-0"	"	
Locust st. to Hickory .....	587	4' 0", cir.	"	42,671.71
	131	3'-6" x 5'-3"	"	
	1,748	5'-9", cir.	"	
	779	4'-3", cir.	"	
	1,611	3'-3", cir.	"	8,921.94
in Mill and Hickory sts ...	838	2'-2" x 3'-3"	"	
				57,660.29
Mill st., Locust to Pine .....	943	2'-6" x 3'-9"	"	4,764.79
east from Main.....	236	8"	Cem.	75.45
				4,840.24
Monmouth st., west from Yale	64	12"	Clay	45.95
	278	10"	"	281.47
northwest from Berkeley...	350	12"	"	235.62
north and east from Dor-				
chesterst.....	199	12"	"	218.15
	171	10"	"	121.75
				902.94
Monroe st., Hancock to East-				
ern ave .....	611	18"	Cem.	1,840.52
	789	15"	"	
	316	12"	"	
Eastern ave. to Colton st..				
Monson ave., north from				
Greene st.....	200	8"	Clay	....
Montmorenci st., Chestnut to				
Massasoit .....	676	12"	"	790.32

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Montrose st., State to Burr....	338	15"	Clay	\$75.74
	217	12"	"	
	329	10"	"	
Morgan st., west from Garden brook.....	252	12"	Cem.	\$199.08
east from Garden brook....	568	18"	"	1,092.71
	90	18"	Clay	233.10
				1,524.89
Morris st.....	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
Mountain View st., north from Park ave.....	297	12"	Clay	3,301.90
	297	10"	"	....
Mulberry st., east from Maple st.....	687	15"	"	1,246.18
	629	12"	"	
	246	10"	"	
extension northerly.....				233.59
west from Ridgewood ter- race.....	144	15"	"	....
				1,479.77
Murray Hill ave.....	....	....	"	96.24
Myrtle st., north from brook..	107	10"	"	69.76
	237	8"	"	
Myrtle st., I. O., Main to Wor- cester.....	377	24"	"	1,003.44
south from Berkshire st....	180	10"	"	189.63
Nelson ave., north from Greene st.....	90	12"	Cem.	27.96
	188	10"	"	126.54
				154.50
Nelson st., east from brick sewer.....	308	24"	Clay	....
New st.....	237	12"	Cem.	213.02
	33	8"	Clay	14.18
				227.20
Newman st., west from Knox	175	12"	Cem.	11.49
North st., Morgan to Ringgold	198	18"	"	356.84
Church to Grosvenor.....	68	18"	"	157.13
north from Carew.....	190	8"	"	84.88
north from Bancroft.....	153	12"	"	114.54
south from Bancroft.....	302	18"	Clay	411.55
north from Calhoun.....	256	8"	"	48.13
Osgood to Hebron.....	130	18"	Clay	426.85
	165	10"	"	
north from Jefferson ave....	233	8"	"	177.12
Waverly to Grove st.....	362	12"	"	307.88
south from Harriet.....	86	8"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Northampton ave., south from Wilbraham road .....	1,101	12"	Clay	\$830.79
North Church ave., east from Cook's ave .....	209	10"	Cem. }	....
west from Cook's ave. (for cost see Cook's ave.)....	133	10"	" }	....
North Main st., Arch to Os- good .....	730	15"	"	\$713.66
Arch st. to Jefferson ave....	185	2' 2"x3' 3"	Brick	974.27
Jefferson ave. to Waverly st.	369	24"	Clay	2,568.01
	420	20"	"	
	285	15"	"	
	170	12"	"	
north from Wason ave.....	348	12"	"	226.45
north from Morgan.....	173	8"	"	281.41
south from Morgan.....	102	8"	"	90.69
south from Wason ave....	215	2'-0"x3'-0"	Brick	41.98
south from Douglas.....	500	1'-8"x2'-6"	"	860.00
north from Douglas.....	326	2'-4"x3'-6"	"	1,874.35
	272	1'-10"x2'-9"	"	1,840.24
north from Eagle .....	142	24"	Clay	449.66
Harriet to Waverly....	250	24"	"	470.75
				10,391.47
Norwood st., Main to Hanover	1,051	12"	Cem.	1,069.55
Nursery st., Liberty to Franklin	694	2'-8", cir.	Brick	2,284.52
north from Franklin.....	587	2'-8", cir.	"	....
				2,284.52
Oak st., north from Union (for cost see State).....	717	18"	Cem.	....
Union to Tyler.....	220	18"	Clay	752.00
	268	15"	"	
north from Walnut.....	158	18"	Cem.	280.65
				1,032.65
Oak st., I. O., north from Main	179	15"	"	637.00
	171	12"	"	
south from Main st.....	590	2'-2"x3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
south from Hampshire.....	285	18"	"	1,509.70
	300	15"	"	
	400	12"	"	
				6,145.33
Oak Grove ave., north from State st.....	349	18"	Clay	....
	327	15"	"	
	158	12"	"	
extension northerly .....	256	12"	"	....
Oakland st., Dickinson st. to Belmont ave.....	895	24"	"	2,218.71



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oakland st., southerly from Orange st. ....	218	8"	Clay	\$110.79
Olive st., Eastern ave. to Logan st. ....	540	10"	"	\$2,329.50
Orange st., west from White st.	381	12"	"	400.76
east from White st. ....	649	10"	"	961.85
east from Highland st. ....	699	10"	"	
Orchard st., west from Plain- field st. ....	583	8"	"	1,015.67
	325	20"	"	
	301	15"	"	
	297	12"	"	
Orleans court, west from Or- leans st. ....	140	10"	"	....
Orleans st., north from Union	205	8"	"	
	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	"	
north from Tyler. ....	188	10"	Cem.	146.13
north from Pendleton ave	231	12"	"	327.78
				966.38
Osgood st., Garden brook to North st. ....	92	18"	Clay	174.87
	588	18"	Cem.	1,544.57
west from Garden brook. ....	257	12"	"	
				1,719.44
Ozark st., south from Grand ave.	456	10"	Clay	23.55
Oxford st., north from Cres- cent terrace. ....	63	12"	"	....
Palmer ave., east from Locust st	14	12"	Cem.	....
	351	18"	Clay	1,165.79
	337	15"	"	
				1,165.79
Park st. ....	1,140	18"	Cem.	1,593.35
Parker st., I. O., from Loon pond to B. & A. R. R. ....	1,227	12"	Clay	1,266.36
south from Main st. ....	1,098	24"	"	2,460.31
south from Chicopee river. ....	32	24"	"	261.81
	221	12"	"	
				2,968.48
† Parkwood st. ....	419	10"	"	23.55
Pasadena ave., south from White st. ....	156	12"	"	258.61
	291	10"	"	
Pasco st., I. O., south from Essex	622	10"	"	537.36
extension southerly. ....	102	10"	"	47.49
				584.

† Renamed.

## SEWER CONSTRUCTION—CONTINUED.

NAME OF SEWER.	Length in Feet.	Slze.	Material.	Cost.
Patton st., east from Garden brook.....	1,238	15"	Cem.	\$46.18
west from Garden brook....	214	10"	Clay	173.73
				\$219.91
†Peabody lane.....	212	12"	Cem.	162.76
Pearl st .....	190	...	Brick	96.16
Chestnut to Spring.....	514	24"	Clay	1,792.62
	447	20"	"	
				1,888.78
Pendleton ave., Walnut st. to Hancock.....	287	18"	Cem.	
	524	15"	"	1,603.16
	429	12"	"	
Hancock st. to Eastern ave.	600	18"	"	1,395.98
	793	15"	"	
				2,999.14
Phoenix ave.....	236	18"	Clay	
	250	15"	"	840.32
	89	10"	"	
Fine st., Mill to Cedar.....	740	2'- 6"x3'-9"	Brick	
	1,529	3'- 6"x5'-3"	"	13,659.54
	500	3'-10"x5'-9"	"	
Cedar to Walnut.....	62	18"	Cem.	
	884	15"	"	1,665.54
	631	12"	"	15,325.08
Fine st., I. O.....	1,896	24"	"	4,170.03
Fine st. court, east from Pine st.	348	10"	"	266.89
Pineywoods ave., east from Magnolia terrace.....	343	20"	Clay	
	404	12"	"	....
west from Magnolia terrace	350	10"	"	....
northeast from Washington ave .....	334	15"	"	
	263	12"	"	....
east from Jackson st.....	341	12"	"	....
Plainfield st., Wason ave. to Demond.....	304	24"	Clay	
	249	20"	"	1,253.59
	53	18"	"	
Rowland ave. to Talcott ...	274	24"	"	1,208.95
	299	20"	"	
Sargeant st. to Fulton st....	414	18"	"	
	537	15"	"	2,525.13
	456	12"	"	
	244	10"	"	
north from Talcott ave.....	216	10"	"	158.46
Washburn to Orchard ....	331	2'- 8"x4'-0"	Brick	1,555.00
south from Washburn .....	122	12"	Clay	129.78

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Plainfield st., Orchard to New- land.....	303	2'-6"x3'-9"	Brick	\$2,367.98
Pleasant st.....	296	12"	Cem.	\$9,198.84
Plymouth st., Plainfield to Ful- ton .....	375	10"	Clay	249.74
Potter place, north from State st.....	396 301 274	15" 12" 10"	" " " }	196.59 .....
† Prince st., King st. to Le- banon st.....	329	12"	Cem.	333.15
Princeton st., Yale to Vas- sar .....	665	12"	"	.....
St. James ave. to Cornell st.	298	12"	"	195.52
Bay to Amherst.....	103 689 151	18" 18" 15"	" " Clay	289.08 724.15 177.72
Prospect st., east from Chest- nut.....	218 199 196	18" 15" 12"	" " " }	1,586.47 633.53
Pynchon st.....	950	2'-0"x3'-0"	Brick	3,108.02
Queen st., Walnut to Hancock	634	12"	Cem.	594.63
Quincy st., Oak to Steh- bins .....	860	12"	"	577.06
Hancock to Stebbins .....	522	12"	"	549.58
Hancock to Eastern ave....	637 765	18" 15"	" " }	1,598.58
Colton to Eastern ave.....	208	10"	Clay	156.87
Reed st., south from State....	219 309	12" 10"	" " }	2,602.80 28.74
Revere st., south from White	750 250 209	20" 10" 8"	" " " }	23.33
Richelieu place, east from Richelieu st.....	100	8"	"	.....
Richelieu st., north from Cooley lot .....	301	10"	"	.....
Ridgewood place, north from Mulberry st.....	400	12"	"	22.45
Ringgold st.....	117 632	18" 12"	Cem. " }	681.05
Ripley ave., south from St. James .....	230	10"	"	103.45
Riverview st., north from River- view terrace.....	68	10"	Clay	.....

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
†Riverview terrace, easterly from Fort Pleasant ave....	298 322 105	15" 12" 10"	Clay " "	.....
Rowland ave., Conn. river to North Main st., including 630' in Douglas st.....	579 51 1,247 1,330	5'-3", cir. 1'-8" x 2'-6" 6'-6", cir. 6'-0", cir.	Brick " " "	
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge ave., east from Main st Salem st. (see Elliott).....	574	24"	"	49.43
Sanford st.....	536	3'-2" x 4'-9"	Brick	4,014.47
School st., Union to Mulberry north from Union.....	549 262	15" 10"	Clay "	\$620.95 204.00
Seventh st.....	830	12"	Cem.	824.95
Sewer in ave., south from Hampden st.....	111	12"	"	661.03
Sewer east from Main st., south from Hubbard ave.....	655	12"	"	147.14
Sheldon st., west from North Main st.....	42	10"	Clay	441.92
Sharon st., Main to Garden brook.....	360	15"	"	43.87
east from Garden brook....	601	18"	"	762.77
east from 18" pipe.....	463	12"	"	1,211.18
Shattuck ave., Maynard to Willard.....	200 143 50	10" 8" 8"	Clay " "	1,973.95
extension easterly.....	175	12"	Cem.	.....
Sherman st., Bay to Clarendon Bay to McKnight.....	448 301	12" 18"	" Clay	571.12
McKnight to State.....	301 544 200	15" 12" 12"	" " Cem.	1,314.14
Smith st., Knox to Dorne....	82	6"	Clay	1,885.26
Sorrento ave., north from Sum- ner ave.....	281 130	15" 12"	Cem. "	27.26
Spring st., south from Lyman	470	18"	"	7.49
Worthington to State.....	640 644	15" 12"	" "	2,460.42
extension to Worthington st	132	12"	Clay	87.28

† Renamed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Spring st. (for brick sewer see Worthington st.)				
Worthington to Summer...	183	5'-0"	Brick	\$11,023.12
including Summer st., north from Spring....	89	6'-0"x4'-3"	"	
	984	4'-2"x6'-3"	"	
(See Summer st.)				\$13,570.83
Springfield st. and Glenwood.	677	3'-6", cir.	Brick	14,614.89
	598	3'-3", cir.	"	
	389	4'-3", cir.	"	
	1,292	3'-0", cir.	"	
	40	2'-0", cir.	"	
	16	2'-10"x4'-3"	"	
	1,294	24"	Clay	3,889.98
Spruce st. ....	600	12"	Cem.	18,504.87
Spruceland ave., Magnolia terrace to Beechwood ave.	67	8"	Clay	558.03
east from Beechwood ave...	242	8"	"	136.48
west from Beechwood.....	648	8"	"	.....
extension to Long Hill st...	93	8"	"	153.52
				290.00
Stafford st., west from Armory st .....	402	10"	"	210.53
State st., west from Water....	152	12"	Cem.	.....
	91	12"	"	71.19
west from Main (including cost of 275' in Water)....	907	18"	"	1,676.39
	636	18"	"	1,433.50
Main to Dwight.....	3,855	2'-cir.	Brick	5,770.83
	505	18"	Cem.	
	130	12"	Clay	
west from Oak st.....				212.78
east from Oak (including cost of Oak north from Union).....	2,110	18"	Cem.	3,470.51
Hancock to Sherman.....	1,147	3'- 4"x5'-0"	Brick	13,555.85
Sherman to Chapin.....	492	3'- 0"x4'-6"	"	
Chapin st. to Andrew.....	726	3'- 0"x4'-6"	"	
Andrew st. to Oak Grove ave.....	937	2'-10"x4'-3"	"	10,793.96
east from Oak Grove ave .....	548	2'- 4 x3'-6"	"	5,042.79
	283	2'- 2"x3'-3"	"	
	352	2'- 0"x3'-0"	"	
Courtland st. to almshouse	355	24"	Clay	1,897.59
	112	18"	"	
	1,547	12"	"	
Stearns ave., north from Bridge st.....	172	12"	"	43,826
				206

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Stebbins st.....	506	12"	Cem.	\$467.11
Sterns terrace, north from Central st. (including 105' in Central).....	350 148	12" 12"	Clay "	\$537.88 267.17
St. James ave., north from Bay st.....	658	12"	Cem.	521.28
Florida st. to Ripley ave....	469	12"	"	500.89
north from Florida st.....	417 300	18" 12"	" "	1,073.90
St. James ave., Clarendon st. to Westminster.....	248	15"	Cem.	404.60
Dartmouth st. to Harvard ..	385	2'-3"x3'-0"	Brick	2,738.53
Harvard to Princeton.....	528	24"	Clay	1,587.44
north from Princeton.....	308 249 57	18" 15" 12"	" " "	965.55
Clarendon to Dartmouth ...	138	8"	"	64.82
				7,857.01
Stockbridge st.....	777	18"	Cem.	1,084.57
Sullivan st., east from Armory	395	12"	Clay	....
Summer st., north from old brook .....	1,025 1,091	3'- 8"x5'-6" 2'-10"x4'-3"	Brick "	14,524.00
(See Spring st.)				
Sumner ave., Fort Pleasant ave. to Randolph st....	673	2'- 0"x3'-0"	"	
Randolph st. to Jackson. ...	360	1'-10"x2'-9"	"	7,968.46
Jackson st. to Hamilton....	360	1'- 8"x2'-6"	"	
Hamilton st. to Greenleaf...	367	1'- 6"x2'-3"	"	
Greenleaf st. to Belmont ave.	355 851 736 272 426	20" 18" 15" 12" 10"	Clay " " " "	2,906.29
east from Belmont ave.....	100	8"	"	37.49
Dickinson st. to White.....	2,219	2'-8"x4'-0"	Brick	11,531.37
Fort Pleasant ave. to Long Hill st.....	448 358	12" 10"	Clay "	815.24
				23,258.85
Symonds ave., Worthington st. to Bridge (includes cost of Bond place).....	800	15"	Cem.	696.89
Talcott ave., Fisk ave. to Plainfield st .....	362 316	15" 12"	Clay "	549.57

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Taylor st., Main to Chestnut	650	15"	Clay	\$1,347.50
	341	12"	"	
	248	12"	"	
				\$1,603.23
Temple st., outlet into High school sewer .....	169	15"	"	171.71
Tenth st., east from Garden brook .....	300	18"	"	1,256.39
	302	15"	"	
	421	12"	"	
	4	8"	"	
Terrence st. ....	48	10"	Cem.	34.02
	374	12"	Clay	565.26
	313	10"	"	
				599.28
Thompson st., south from Worthington .....	603	12"	Cem.	638.27
St. James ave. to Bay .....	703	15"	"	675.99
State to Bay .....	852	12"	"	653.12
				1,967.38
Tyler st., Oak to Hancock....	717	15"	"	1,089.25
	663	12"	"	
Hancock to Eastern ave....	601	18"	"	776.27
	795	15"	"	644.31
east from Eastern ave.....	251	10"	"	139.49
				2,651.32
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st. ....	2,024	3'-4" x 3'-0"	Brick	27,384.14
	302	2'-6" x 3'-6"	"	
	2,688	2'-0" x 3'-0"	"	
	848	1'-8" x 2'-6"	"	
Oak to Orleans .....	404	15"	Cem.	467.96
Stebbins to Orleans .....	428	20"	Clay	737.72
Hancock to Stebbins .....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	"	
Hancock to Eastern ave....	600	18"	Cem.	1,413.45
	800	15"	"	
east from Eastern ave.....	248	10"	Clay	152.56
				24,453.24
Vassar st., north from Harvard (flush gate) .....	550	12"	Cem.	22.51
Ventura st., north from Sumner ave. ....	351	10"	Clay	239.21
Vernon st., east from Water west from Main .....	639	15"	Cem.	795.08
	216	12"	"	310.63
				1,104

## SEWER CONSTRUCTION—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Vine st.....	697	12"	Cem.	\$602.45
Vinton st., Liberty to Franklin	357	12"	Clay	\$357.63
	262	10"	"	227.15
				584.78
Walnut st., south from State	69	....	Brick	85.23
north from Charter ave ....	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak.....	17	12"	"	20.50
	558	24"	Clay	792.64
Cedar to Oak.....	1,142	2'-0"x3'-0"	Brick	4,956.57
	272	18"	Cem.	410.04
from Cedar to below Han-				
cock .....	784	15"	"	1,073.38
	100	12"	"	
north from Florence.....	53	8"	"	27.12
Hickory to Florence.....	1,026	12"	Clay	992.67
north from Manhattan.....	249	10"	"	212.35
				9,471.30
Walter st., east from Birnie ave.	285	12"	Cem.	14.86
Waltham ave., south from Wil-				
braham road .....	546	12"	Clay	598.61
Wareham st., south from				
Grand ave.....	419	10"	"	21.24
Warner place, west from Fort				
Pleasant ave.....	508	12"	"	....
	198	10"	"	
extension to Long Hill st...	89	10"	"	51.88
				51.88
Warriner ave., east from Locust				
st. ....	448	12"	"	399.54
Washburn st., Conn. river to				
Conn. R. R. R. ....	1,758	7'-0", cir.	Brick	21,678.46
Washington ave. (see Long Hill				
st.)				
Wason ave., Conn. river to				
Plainfield st.....	451	3'-10"x5'-9"	"	16,610.72
Plainfield st. to Fisk ave...	1,051	3'-4"x5'-0"	"	
Fisk to Birnie .....	634	3'-2"x4'-9"	"	
Birnie to North Main st ...	247	2'-0"x3'-0"	"	
Water st., Gardner to Lor-				
ing.....	474	1'-10"x2'-9"	"	1,182.58
north from Loring.....	345	12"	Cem.	237.38
Margaret to near State....	721	2'-0"x3'-0"	Brick	2,284.34
	868	18"	Cem.	
south from Elm.....	275	18"	"	....
Elm to Pynchon.....	43	2'-0"x3'-0"	Brick	198.00
	353	2'-6"x3'-6"	"	2,949.29



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Water st., north from Pyncheon	584	18"	Cem.	\$1,854.84
north from Worthington...	648	15"	"	
	61	12"	"	
south from Worthington...	225	12"	"	
				283.50
Water st. extension.....	....	18"	Clay	\$8,939.38
Waverly st., from North Main				8.47
to Chestnut ....	473	20"	"	1,197.09
	487	10"	"	
Webster st., Liberty to Frank-				
lin .....	601	12"	"	395.54
Welcome place, north from				
Bay st. ....	238	8"	"	....
Wellesley st., east from Corn-				
nell st. (flush gate and well				
holes) .....	373	12"	Cem.	64.68
Wellington ave., south from				
Wilbraham road.....	287	15"	Clay	....
	244	12"	"	
	291	10"	"	
	458	15"	"	
Wendell ave., east from Main st.				
Westford ave., south from				
Wilbraham road.....	300	15"	"	676.33
	300	12"	"	
	350	10"	"	
	300	15"	"	
Westminster st., Bay to State.				
	300	12"	"	705.11
	201	10"	"	700.02
	773	12"	"	
south from St. James ave..				
White st., Allen to Orange...	747	24"	"	1,717.86
	674	20"	"	1,490.97
	274	18"	"	
south from Orange.....	388	15"	"	389.27
extension to Dawson ave ..	292	15"	"	275.73
				3,578.33
Whitney ave.....	450	12"	Cem.	287.38
Wilbraham ave., south from				
Wilbraham road.....	1,125	12"	Clay	874.50
Alden st. to Beverly.....	999	10"	"	1,121.36
	1,180	8"	"	
				1,995.86
Wilbraham road, east from				
State st.....	248	12"	Cem.	157.79
State to Northampton.....	1,451	2'-0"x3'-0"	Brick	6,198.76

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wilbraham road, east from Northampton ave. ....	472	2'-6" x 3'-9"	Brick	\$8,970.16
	476	2'-4" x 3'-6"	"	
	478	2'-2" x 3'-3"	"	
	473	2'-0" x 3'-0"	"	
	254	1'-10" x 2'-9"	"	
	256	1'-8" x 2'-6"	"	
east from brick sewer. ....	263	20"	Clay	859.35
	405	12"	"	
				\$16,186.00
Wilcox st., east from Water	548	15"	Cem.	891.89
	327	12"	"	
west from Water. ....	463	12"	"	205.76
Willard ave., south from Shat- tuck. ....	215	8"	Clay	1,097.65
	282	18"	"	785.26
north from State. ....	300	15"	"	
	241	12"	"	
				785.26
William st. ....	1,576	12"	Cem.	1,485.86
west from Water. ....	76	15"	"	459.79
	425	12"	"	
				1,895.65
Willow st., Cross to State. ....	413	12"	Clay	791.42
Cross to Park. ....	265	12"	"	378.17
Union to Park. ....	216	18"	Cem.	325.82
south from Union. ....	220	15"	"	302.23
				1,797.14
Wilmont st., east from Dick- inson st. ....	349	18"	Clay	610.02
Winchester st. ....	424	12"	"	357.96
Windsor st., west from Knox.	80	15"	Cem.	....
	485	10"	"	
Winthrop st. ....	52	18"	"	220.81
	141	15"	"	
	520	....	Stone	
Woodside ave., north from Belmont ave. ....	451	10"	Clay	321.97
Worcester ave., Plainfield to Birnie ave. ....	1,486	15"	Cem.	53.14
Worcester st., I. O., east from Oak. ....	275	12"	Clay	519.07
	212	10"	"	
east from Pine. ....	546	20"	"	
				768.42

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worcester st., I. O., west from Myrtle.....	4 290 382	24" 20" 2'-0" x 3'-0"	Clay } " } Brick	\$945.80 1,283.00
Worthington st., submerged outlet .....	194 22	24" 24"	Wood C. Iron	1,883.04 176.25
Conn. river to Main st. ....	1,038	5'-7" x 7'-0"	Brick	33,410.12
Main to Dwight. ....	821	5'-4" x 7'-0"	"	
Dwight to Garden brook ..	566	4'-0" x 6'-0"	"	
from Dwight st. to east of Chestnut .....	530	5'-0" x 5'-3"	"	3,015.70
extension to Spring st. ....	738	4'-3"	"	
including Spring st., north from Worthington.....	35	5'-0"	"	4,261.35
Spring st., south from Worth- ington .....	47	2'-0" x 3'-0"	"	
east from main sewer.....	804 242 251	18" 15" 12"	Cem. } " } "	1,508.23
near Autumn st. ....	113	12"	"	118.78
near Sackett's ave.....	145	10"	"	111.47
east from West brook.....	329 217	15" 12"	Clay } "	1,110.54
east from Autumn st. and west from Sackett's ave..	281 98	15" 12"	" } "	934.84
Sackett's ave. to Federal st.....	1,131	12"	"	1,113.49
head of Magazine.....	158	18"	"	375.10
near Magazine to St. James ave.....	248 354 1,614	2'-8" x 4'-0" 2'-1" x 3'-11" 3'-4" x 5'-0"	Brick } " } "	12,493.94
Yale st., Dartmouth to Prince- ton.....	350 359 283	24" 18" 16"	Clay } " } "	1,770.12
north from Princeton.....	712	12"	"	452.46
York st.....	1,203	7'-8", cir.	Brick	2,222.00 15,912.00
Total .....	520,213			\$1,227,000

## RECAPITULATION BY SIZES.

DESCRIPTION	Length in Feet.	Size.	Material.
Elliptical shaped...	635	7'- 3"x4'-10"	Brick and cem. mortar.
" " " " " " " " " " " "	1,080	7'- 0"x4'- 8"	" " " "
" " " " " " " " " " " "	1,170	6'- 9"x4'- 6"	" " " "
" " " " " " " " " " " "	1,038	5'- 7"x7'- 0"	" " " "
" " " " " " " " " " " "	821	5'- 4"x7'- 0"	" " " "
" " " " " " " " " " " "	460	4'-10"x7'- 3"	" " " "
" " " " " " " " " " " "	869	4'- 8"x7'- 0"	" " " "
" " " " " " " " " " " "	1,040	4'- 4"x6'- 6"	" " " "
" " " " " " " " " " " "	1,980	4'- 2"x6'- 3"	" " " "
" " " " " " " " " " " "	750	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	131	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	830	3'- 4"x5'- 0"	" " " "
" " " " " " " " " " " "	819	3'- 0"x4'- 6"	" " " "
" " " " " " " " " " " "	2,219	2'- 8"x4'- 0"	" " " "
" " " " " " " " " " " "	1,018	2'- 2"x3'- 3"	" " " "
" " " " " " " " " " " "	16	2'-10"x4'- 3"	" " " "
Egg shaped...	566	4'- 0"x6'- 0"	" " " "
" " " " " " " " " " " "	1,131	3'-10"x5'- 9"	" " " "
" " " " " " " " " " " "	2,345	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	3,381	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	11,200	3'- 4"x5'- 0"	" " " "
" " " " " " " " " " " "	1,592	3'- 2"x4'- 9"	" " " "
" " " " " " " " " " " "	2,877	3'- 0"x4'- 6"	" " " "
" " " " " " " " " " " "	2,028	2'-10"x4'- 3"	" " " "
" " " " " " " " " " " "	364	2'- 9"x4'- 11"	" " " "
" " " " " " " " " " " "	2,780	2'- 8"x4'- 0"	" " " "
" " " " " " " " " " " "	4,818	2'- 6"x3'- 9"	" " " "
" " " " " " " " " " " "	655	2'- 6"x3'- 6"	" " " "
" " " " " " " " " " " "	150	2'- 5"x3'- 7 1/4"	" " " "
" " " " " " " " " " " "	8,343	2'- 4"x3'- 6"	" " " "
" " " " " " " " " " " "	7,829	2'- 2"x3'- 3"	" " " "
" " " " " " " " " " " "	603	2'- 1"x3'- 1 1/4"	" " " "
" " " " " " " " " " " "	21,241	2'- 0"x3'- 0"	" " " "
" " " " " " " " " " " "	3,404	1'-10"x2'- 9"	" " " "
" " " " " " " " " " " "	2,382	1'- 8"x2'- 6"	" " " "
" " " " " " " " " " " "	917	1'- 6"x2'- 3"	" " " "
Box with semi-circular top...	530	5'- 0"x5'- 3"	Plank, stone, brick, and cement mortar.
Segmental .....	89	6'- 0"x4'- 3"	Brick and cement mortar.
" " " " " " " " " " " "	60	5'- 0"x2'- 1"	Concrete.
Miscellaneous shapes.....	10,824	4'-0" and under	Stone, brick, and mortar.
Circular.....	3,017	7'-0"	Brick and cement mortar.
" " " " " " " " " " " "	3,019	6'-6"	" " " "
" " " " " " " " " " " "	1,330	6'-0"	" " " "
" " " " " " " " " " " "	1,743	5'-9"	" " " "
" " " " " " " " " " " "	3,842	5'-6"	" " " "
" " " " " " " " " " " "	948	5'-3"	" " " "
" " " " " " " " " " " "	2,357	5'-0"	" " " "

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	3,274	4' 6-10'	Brick and cement mortar.
" .....	1,762	4' 6"	" " "
" .....	3,362	4' 3"	" " "
" .....	952	4' 1"	" " "
" .....	2,399	4' 0"	" " "
" .....	385	3' 9"	" " "
" .....	677	3' 6"	" " "
" .....	2,209	3' 3"	" " "
" .....	2,549	3' 0"	" " "
" .....	2,072	2' 8"	" " "
" .....	40	2' 0'	" " "
" .....	23,559	24"	Clay pipe.
" .....	15,260	20"	" "
" .....	18,041	18"	" "
" .....	31,275	15"	" "
" .....	66,400	12"	" "
" .....	54,935	10"	" "
" .....	13,656	8"	" "
" .....	368	6"	" "
" .....	28,520	18"	Cement pipe.
" .....	47,502	15"	" "
" .....	73,753	12"	" "
" .....	4,853	10"	" "
" .....	305	8"	" "
" .....	96	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	550	24"	Wood pipe.
" .....	290	18"	" "
Total .....	520,213		

Classified as follows:—

	Feet.	Mds.
Brick and cement mortar, . . . . .	129,408	24.3
Miscellaneous materials, . . . . .	12,378	2.4
Clay pipe, . . . . .	231,875	46.4
Cement pipe, . . . . .	146,552	27.7
Total, . . . . .	520,213	99.9

# REPORT ON SEWERS.

## PITULATION BY SIZES.—CONCLUDED.

LOCATION.	Length in Feet.	Size.	Material.
.....	3,274	4' 6-10"	Brick and cement mortar
.....	1,762	4' 6"	" " "
.....	3,362	4' 3"	" " "
.....	952	4' 1"	" " "
.....	2,399	4' 0"	" " "
.....	385	3' 9"	" " "
.....	677	3' 6"	" " "
.....	2,209	3' 3"	" " "
.....	2,549	3' 0"	" " "
.....	2,072	2' 8"	" " "
.....	40	2' 0"	Clay pipe.
.....	23,559	24"	" "
.....	15,260	20"	" "
.....	18,041	18"	" "
.....	31,275	15"	" "
.....	66,400	12"	" "
.....	54,935	10"	" "
.....	13,656	8"	" "
.....	368	6"	Cement pipe.
.....	28,520	18"	" "
.....	47,502	15"	" "
.....	73,753	12"	" "
.....	4,853	10"	" "
.....	305	8"	Cast-iron pipe.
.....	96	24"	" "
.....	28	18"	Wood pipe.
.....	550	24"	" "
.....	290	18"	" "
.....	520,213		

follows:—

Brick and cement mortar,  
 Miscellaneous materials,  
 Clay pipe,  
 Cast-iron pipe,  
 Total,

Feet.  
 129,408  
 12,378  
 231,875  
 146,552  
 520,213

Annual

Superintendent  
 Streets and

Springfield  
 Massachusetts

For the Year  
 Nineteen  
 and Three

# REPORT ON SEWERS.

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
ircular .....	3,274	4' 6-10'	Brick and cement mortar.
" .....	1,762	4'.6"	" " "
" .....	3,362	4'.3"	" " "
" .....	952	4'.1"	" " "
" .....	2,399	4'.0"	" " "
" .....	385	3'.9"	" " "
" .....	677	3'.6"	" " "
" .....	2,209	3'.3"	" " "
" .....	2,549	3'.0"	" " "
" .....	2,072	2'.8"	" " "
" .....	40	2'.0'	" " "
" .....	23,559	24"	Clay pipe.
" .....	15,260	20"	" "
" .....	18,041	18"	" "
" .....	31,275	15"	" "
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" .....	54,935	10"	" "
" .....	13,656	8"	" "
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" .....	28,520	18"	Cement pipe.
" .....	47,502	15"	" "
" .....	73,753	12"	" "
" .....	4,853	10"	" "
" .....	305	8"	" "
" .....	96	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	550	24"	Wood pipe.
" .....	290	18"	" "
Total.....	520,213		

Classified as follows:—

	Feet.	Miles.
Brick and cement mortar, . . . . .	129,408	24.51
Miscellaneous materials, . . . . .	12,378	2.34
Clay pipe, . . . . .	231,875	
Cement pipe, . . . . .	146,552	
Total, . . . . .	520,213	

★ Annual Report  
**Superintendent of  
Streets and Sewers**

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**Springfield, Massachusetts**



**For the Year 1903**





★ Annual Report  
**Superintendent of  
Streets and Sewers**

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**Springfield, Massachusetts**



**For the Year 1903**



THIRTY-FIFTH ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1903.

*To the City Council:—*

In accordance with the requirements of Chapter 18, Section  
of the Acts of the Legislature of 1902.

COMPLIMENTS OF

ARTHUR A. ADAMS,

Superintendent of Streets and Sewers.

From other departments, private parties and by transfers, . . .	16,608 78	30,608 78
<b>STREET WATERING—</b>		
By regular appropriation, . . .	\$7,300 00	
From abutters by assessment and from corporations and private parties, . . . . .	18,675 19	25,975 19
<b>Total, . . . . .</b>		<b>\$261,090 03</b>

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# THIRTY-FIFTH ANNUAL REPORT

## OF THE

# STREET DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1903.

*To the City Council:—*

In accordance with the requirements of Chapter 18, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department and descriptions of work done during the financial year ending December 10, 1903.

## FINANCES IN GENERAL.

### RECEIPTS.

#### HIGHWAYS AND BRIDGES—

By regular appropriation, . . .	\$140,000 00	
From other departments, corporations and private parties, . . .	64,506 06	
	<u>          </u>	\$204,506 06

#### WALKS AND CURBING—

By regular appropriation, . . .	\$14,000 00	
From other departments, private parties and by transfers, . . .	16,608 78	
	<u>          </u>	30,608 78

#### STREET WATERING—

By regular appropriation, . . .	\$7,300 00	
From abutters by assessment and from corporations and private parties, . . . . .	18,675 19	
	<u>          </u>	25,975 19

Total, . . . . .	<u>\$261,090 03</u>
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## REPORT ON STREETS.

## EXPENDITURES.

Highways and Bridges, . . . . .	\$204,506 06	
Walks and Curbing, . . . . .	29,004 68	
Street Watering, . . . . .	25,513 60	
		<u>\$259,024 32</u>

## UNEXPENDED BALANCES.

Walks and Curbing, . . . . .	\$1,604 12	
Street Watering, . . . . .	461 59	
		<u>\$2,065 71</u>

## WORK IN GENERAL.

Streets surfaced with gravel, . . . . .	19,018 sq. yds.
Streets macadamized, . . . . .	104,352 " "
Streets macadam resurfaced, . . . . .	33,937 " "
Streets paved with brick, . . . . .	2,079 " "
Streets paved with granite blocks, . . . . .	376 " "
Streets paved with wood blocks, . . . . .	2,878 " "
Brick sidewalks (new), . . . . .	4,009 feet
Brick sidewalks (relaid), . . . . .	9,300 "
Tar concrete sidewalks (new), . . . . .	3,210 "
Tar concrete sidewalks (resurfaced), . . . . .	489 "
Cement concrete sidewalk (new), . . . . .	27 "
Crosswalks, . . . . .	26
Curbing set, . . . . .	21,967 feet
Curbing reset, . . . . .	13,473 "
Streets watered, . . . . .	77 miles

## FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

By regular appropriation, . . . . .	\$140,000 00
From Springfield Street Railway Com- pany, by agreement on account of paving in Belmont avenue, . . . . .	548 16
Amount carried forward,	<u>\$140,548 16</u>

Amount brought forward,	\$140,548 16	
From Springfield Street Railway Company, on account of corporation tax, . . . . .	22,868 52	
From Springfield Street Railway Company, on account of excise tax, . . . . .	10,086 82	
From South End Bridge—Separation of Grades, . . . . .	16,556 05	
From other departments and private parties,	14,446 51	
		\$204,506 06

## EXPENDITURES.

Bridges, . . . . .	\$3,258 61	
City teams, uncredited balance, . . . . .	29 91	
City yard, Lyman street, . . . . .	2,344 83	
City yard, Logan street, . . . . .	81 66	
Engineering, . . . . .	353 24	
Labor and material charged to other depart- ments and accounts, . . . . .	21,053 90	
Labor and material charged to private parties, . . . . .	10,125 96	
Land damages on account of street reloca- tions, . . . . .	349 66	
Materials on hand, . . . . .	2,724 15	
Office and general expense, . . . . .	2,423 47	
Salary, . . . . .	1,851 38	
Salary of Assistant Superintendent—part, .	519 30	
Street and crosswalk cleaning, . . . . .	29,831 82	
Street cleaning supplies and tools, . . . . .	441 16	
Street construction, graveled, . . . . .	10,953 57	
Street construction, macadamized, . . . . .	50,814 22	
Street construction, paved, . . . . .	15,272 91	
Streets macadam resurfaced, . . . . .	7,885 47	
Street repairs, incidental, . . . . .	19,474 90	
Streets, winter expenses, . . . . .	15,413 87	
Tools, . . . . .	1,192 41	
	\$196,895 90	
Less earnings of steam rollers, . . . . .	1,087 73	
	195,808 17	
Transferred to Walks and Curbing, . . . . .	2,000 00	
Transferred to South End Bridge-Raising,	7,197 89	
		\$204,506 06



## WALKS AND CURBING.

## RECEIPTS.

By regular appropriation, . . . . .	\$14,000 00	
From Highways and Bridges, transferred, . . . . .	2,000 00	
From Sewers and Drains, transferred, . . . . .	1,000 00	
From abutters for walks laid previous to 1903, . . . . .	6,773 53	
From abutters for walks laid during 1903, . . . . .	6,835 25	
		<u>\$30,608 7</u>

## EXPENDITURES.

Office and general expense, . . . . .	\$230 18	
Salary of Assistant Superintendent—part, . . . . .	380 82	
Engineering, . . . . .	445 07	
Setting and resetting curbing not chargeable to abutters, . . . . .	5,707 10	
Work and material not chargeable to abutters, . . . . .	2,123 55	
Work and material chargeable to abutters, . . . . .	15,775 88	
Crosswalks, construction, and repairs, . . . . .	3,607 03	
Materials on hand, . . . . .	561 48	
Tools, . . . . .	48 55	
Damages, . . . . .	125 00	
		<u>\$29,004 66</u>
Unexpended balance, . . . . .	1,604 12	
		<u>\$30,608 7</u>

## STREET WATERING.

## RECEIPTS.

By appropriation, . . . . .	\$7,300 00	
From abutters by assessments, . . . . .	16,556 34	
By bills rendered, . . . . .	28 59	
From Springfield Street Railway Company, by agreement, . . . . .	2,090 26	
		<u>\$25,975 1</u>

EXPENDITURES.

General expense, . . . . .	\$264 98	
Standpipes,—construction, maintenance, opening and closing, . . . . .	916 02	
Standpipe bases,—construction and main- tenance, . . . . .	374 87	
Carts,—repairs and storage, . . . . .	940 09	
For use of teams, as per pay rolls, . . . . .	1,006 78	
For use of teams, as per contracts, . . . . .	14 632 23	
American Car Sprinkler Company, as per contracts, . . . . .	6,336 00	
Inspector, . . . . .	829 44	
Inspector's team, . . . . .	213 19	
	<u>\$25,513 60</u>	
Unexpended balance, . . . . .	461 59	\$25,975 19

BRIDGE REPAIRS

	Description of Work.	Cost.
Armory street, over Boston and Albany Railroad,	new under and top floors,	\$508 09
Armory street, over Highland Division, N. Y., N. H. & H. R. R.,	new under and top floors,	346 26
Ludlow,	new top floor,	280 89
North End,	floor repairs,	221 87
Old Toll,	repairs and care,	1,612 08
Pasco street,	new top floor,	76 80
Plainfield street,	partial new top floor,	126 92
St. James avenue, over Boston and Albany Railroad,	floor repairs,	35 97
South end,	floor repairs,	49 72
		<u>\$3,258 61</u>

## STREET CONSTRUCTION.

## GRAVEL.

Name.	Limits.	Length in feet.	Area in sq. yds.	Cost of Gravel, including inlets.	Total Cost, including grading, fences, etc.
Berkshire street, completion,					\$45 08
Carew street, Liberty street, easterly,		3,252	7,227	\$898 29	2,777 99
Collins street, Eastern avenue to Logan street,		522	1,578	290 69	290 69
Harvey street,					576 82
King street extension, Highland Division N. Y., N. H. and H. R. R. to Westford avenue,		638	2,125	427 28	504 94
St. James avenue, bridge over Highland Division N. Y., N. H. and H. R. R. to bridge over Boston and Albany R. R.,		2,010	10,274	1,122 08	1,381 88
Worcester street, Indian Orchard, railroad underpass, Athol Branch, B. and A. R. R., to Front street,		3,033	8,088	1,252 05	5,376 17
		9,455	29,292	\$3,990 39	\$10,953 57

## MACADAM.

Name.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost of Macadam, including inlets.	Total Cost, including grading, fences, etc.
Alexander street, north to Chestnut street,		414	1,380	\$0.49 +	\$679 86	\$679 86
Andrew street, State to northerly curb line of Burr street,		1,008	3,213	.46—	1,466 41	1,466 41
Autumn street, Worthington to Summer street,		197	504	.84 +	424 36	424 36

## STREET CONSTRUCTION.—MACADAM CONTINUED.

Name.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost of Macadam, including filths.	Total Cost, including grading, fences, etc.
Beech street, Central to Florence street, .		528	1,303	\$63 +	\$893 64	\$953 64
Belmont avenue, Hall to Oakland street, .		1,028	2,533	.74 +	1,879 29	1,879 29
Churchill street, Sumner avenue to Garfield street, .		575	1,919	.49—	935 33	935 33
College street, State to Wilbraham road, .		527	1,522	.44 +	679 89	679 89
East Hooker street, North Main to North street, .		679	1,786	.51 +	915 23	915 23
Edwards street, Chestnut to Elliott street, .		675	2,219	.46—	1,008 70	1,008 70
Forest Park avenue, Sumner avenue to Forest street, .		752	3,846	.57 +	2,199 87	2,199 87
Franklin street, Cass to Webster street, .		668	2,278	.65—	1,475 73	1,475 73
Garfield street, Forest Park avenue to Belmont avenue, .		1,577	5,220	.57—	2,960 58	2,960 58
Grove street, North Main to North street, .		612	1,734	.51—	883 68	883 68
Grosvenor street, North to Chestnut street, .		738	2,286	.44 +	1,012 14	1,012 14
Hancock street, Walnut to Florence street, .		325	1,083	.61 +	664 13	664 13
Harvard street, St. James avenue to Yale street, .		883	2,933	.41—	1,212 75	1,212 75
Hawthorn street, Hancock to Spruce street, .		540	1,374	.42—	575 96	575 96
Hebron street, North to Chestnut street, .		698	2,204	.43 +	951 67	951 67
Hickory street, Alden street, easterly, .		1,435	3,513	.59 +	2,073 90	2,120 89
King street, Eastern avenue to Highland Div. N. Y., N. H. and H. R. R.,		599	2,015	.44 +	892 24	892 24

## STREET CONSTRUCTION.—MACADAM CONTINUED.

Name	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost of Macadam, including inlets.	Total cost, including grading, fences, etc.
Liberty street, Wolcott to Carew street,		2,800	6,634	\$0.59+	\$3,944 32	\$3,944 32
Main street, Indian Orchard, Pine street to point 104' easterly of Rogers avenue,		2,844	9,608	.62+	5,971 51	6,110 13
Oakland street, Belmont avenue to Dickinson street,		838	2,782	.61+	1,708 92	1,708 92
Orleans street, State to Pendleton avenue,		1,509	4,293	.44—	1,888 13	1,888 13
* Pecusic avenue, South street to South street,		2,205	7,350	.76+	5,005 27	16,553 42
Pleasant street, State to Bay street,		428	1,026	.46—	469 38	469 38
Princeton street, St. James avenue to Bay street,		1,509	6,329	.47+	2,992 06	2,992 06
Ringgold street, North to Chestnut street,		730	2,432	.42—	1,010 96	1,010 96
Rutland avenue, State street to Wilbraham road,		277	926	.37—	341 22	341 22
Spruce street, Central to Florence street,		699	1,737	.46+	805 28	805 28
Thompson street, Bay to Worthington street,		1,337	4,128	.46—	1,896 79	1,896 79
ason avenue, North Main to B. and M. R. R.,		503	1,718	.58+	1,003 18	1,003 18
averly street, North Main to North street,		400	1,333	.58+	751 34	751 34
ebster street, Liberty to Franklin street,		606	2,020	.50—	1,009 51	1,009 51
ilbraham road, Westford avenue, to east- erly side Homer street,		973	3,683	.57—	2,093 50	2,093 50

# REPORT ON STREETS.

11

## STREET CONSTRUCTION.—MACADAM CONTINUED.

Name.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Cost of Macadam, including inlets.	Total cost, including grading, fences, etc.
Yale street, Dartmouth to Princeton street,		863	2,886	\$0.40.	\$1,157 15	\$1,157 15
		<u>32,976</u>	<u>103,753</u>		<u>\$56,233 88</u>	<u>\$67,367 64</u>
* Less cost of Pecousic avenue, paid from South End Bridge,—Separation of Grades,					16,553 42	
					<u>\$50,814 22</u>	

## MACADAM LAID BY PRIVATE PARTIES.

	Length in feet.	Area in sq. yds.
Agawam street, Pecousic avenue to South street, N. Y., N. H. & H. R. R. Co.	230	383
Central street, Cedar to Pine.		533
Springfield street R. R. Co.		9,920
Liberty street, Heywood avenue to Chicopee line, Springfield Street R. R. Co.		1,496
Princeton street, Bay to St. James avenue, Springfield street R. R. Co.	30	123
St. James avenue, at bridge, N. Y., N. H. & H. R. R. Co.		5,213
St. James avenue, State street to end of track, Springfield Street R. R. Co.		449
Wason avenue, B. & M. R. R. to North Main street, Springfield Street R. R. Co.	<u>260</u>	<u>18,117</u>

## MACADAM REPLACED BY PAVING.

Worthington street, Fairbanks place to east- erly Spring street,	269	1,003
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## STREET CONSTRUCTION.

Name.	Limits.	PAVING.		Area in sq. yds.	Cost per sq. yd.	Total cost.
		Material.	Length in feet.			
* Belmont avenue, Hall to Oakland street, between rails and eighteen inches out- side, . . . . .		Catskill blocks,	1,023	914	\$2 31	\$2,115 16
Charles street, Liberty street to land of B. and A. R. R., . . . . .		Granite blocks,	150	376	82	306 83
Main street, east side, south line Worth- ington to Lyman street, north line Liberty to north line Sharon street, west side, Lyman to Hampden street, Main street, south line of Lyman to north line of Liberty,		Creo-resinate Wood blocks,	988	2,872	3 58	10,318 59
Main street, crossing through green op- posite Patton street, . . . . .		Catskill and Metropolitan blocks,	484	2,780	2 77	453 06
curb circles, . . . . .				20 }		
Northington street, Fairbanks place to east- ery line Spring street, . . . . .		Syracuse brick,	269	1,003	2 53	2,541 38
Less amount paid by the Springfield Street Railway Company, by agreement,			2,914	8,128		\$15,821 07
						548 16
						\$15,272 91

## PAVING REPLACED BY OTHER PAVING.

Name.	Limits.	Material.	Length in feet	Area in sq. yds.
ain street, east side, south line Wor-	thington to Lyman street,	Granite blocks,	535	
ain street, west side, Lyman to north	line Hampden street,	Granite blocks,		2,872
ain street, south line of Lyman to	north line of Liberty,	Wood blocks,	484	2,790
ain street, east side, Liberty to north	line Sharon street,	Granite blocks,	453	
ain street, crossing through green	opposite Patton street,	Syracuse brick,		20
			<u>1,472</u>	<u>5,672</u>

## STREETS MACADAM RESURFACED.

Name.	Limits.	Length in feet	Area in sq. yds.	Cost per sq. yd.	Total Cost.
ay street, St. James avenue to	Westminster street,	1,612	5,077	\$0 28	\$1,433 89
entral street, Morris to Maple	street,	447	1,182	37	436 64
t. James avenue, State street to	Highland Div. N. Y., N. H. & H. R. R.,	4,740	16,082	22	3,465 92
ilbraham road, Hawley street	to Westford avenue,	1,538	6,982	23	1,595 56
orthington street, Spring street	to point 70 feet east of				
	Kibbe avenue,	1,908	4,614	21	953 46
		<u>10,245</u>	<u>38,937</u>		<u>\$7,885 47</u>

## STREET REPAIRS—INCIDENTAL.

	Cost.
lden street, macadam, miscellaneous and inlets,	\$162 23
llen street, macadam, gravel, miscellaneous and inlets,	1,956 47
nberst street, inlets,	47 66
rmory street, macadam, gravel and inlets,	60 84
ay street, macadam, gravel, miscellaneous and inlets,	161 93



Belmont avenue, macadam, gravel and miscellaneous, . . . . .	\$261 13
Berkshire street, I. O., gravel, miscellaneous and inlets, . . . . .	726 49
Boston road, gravel and miscellaneous, . . . . .	860 07
Bowdoin street, gravel, miscellaneous and inlets, . . . . .	181 04
Bridge street, macadam and miscellaneous, . . . . .	67 89
Burcham Bend road, gravel and miscellaneous, . . . . .	89 17
Cambridge street, gravel repairs, . . . . .	36 58
Carew street, macadam, gravel and inlets, . . . . .	150 39
Cedar street, macadam, . . . . .	40 46
Center street, I. O., gravel, . . . . .	24 70
Central street, macadam, miscellaneous and inlets, . . . . .	524 74
Chestnut street, macadam, gravel, miscellaneous and inlets, . . . . .	485 64
Chestnut street, I. O., gravel and miscellaneous, . . . . .	31 04
Concord terrace, gravel and miscellaneous, . . . . .	61 47
Cooley street, gravel and miscellaneous, . . . . .	215 42
Cottage street, I. O., gravel, . . . . .	24 87
Court street, macadam and miscellaneous, . . . . .	68 37
Crescent terrace, gravel, . . . . .	20 56
Cypress street, macadam, . . . . .	32 89
Dickinson street, macadam, gravel, miscellaneous and inlets, . . . . .	150 37
Dwight street, miscellaneous and inlets, . . . . .	23 01
Eastern avenue, macadam and inlets, . . . . .	75 89
Essex street, macadam and miscellaneous, . . . . .	58 44
Federal street, macadam, gravel and miscellaneous, . . . . .	26 90
Ferry Street, macadam and miscellaneous, . . . . .	66 50
Florida street, gravel, miscellaneous and inlets, . . . . .	32 84
Fort Pleasant avenue, macadam and gravel, . . . . .	141 84
Fulton street, macadam and inlets, . . . . .	78 51
Gardner street, macadam and inlets, . . . . .	51 86
Grant street, gravel and inlets, . . . . .	34 82
Hall street, gravel and inlets, . . . . .	25 04
Hampden street, I. O., gravel and miscellaneous, . . . . .	271 19
Hancock street, macadam, miscellaneous and inlets, . . . . .	84 80
Hickory street, macadam, gravel and miscellaneous, . . . . .	80 06
High street, macadam, gravel, miscellaneous and inlets, . . . . .	105 44
Huntington street, inlets, . . . . .	72 34
Ingraham avenue, macadam, . . . . .	26 52
James street, gravel, . . . . .	42 15
Liberty street, macadam, gravel, miscellaneous and inlets, . . . . .	197 12
Locust street, macadam, miscellaneous and inlets, . . . . .	149 45
Lombard street, macadam and inlets, . . . . .	35 07

ill street, gravel and miscellaneous, . . . . .	\$105 02
street, macadam and inlets, . . . . .	40 55
reet, macadam, miscellaneous and inlets, . . . . .	756 82
reet, I. O., gravel, miscellaneous and inlets, . . . . .	296 96
treet, macadam, miscellaneous and inlets, . . . . .	156 18
street, macadam and miscellaneous, . . . . .	45 84
d avenue, inlets, . . . . .	217 03
reet, macadam, miscellaneous and inlets, . . . . .	92 03
uth street, gravel, . . . . .	27 55
street, gravel, . . . . .	42 06
ry street, macadam and inlets, . . . . .	127 11
street, I. O., gravel, miscellaneous and inlets, . . . . .	70 95
main street, macadam and miscellaneous, . . . . .	260 61
reet, I. O., macadam, gravel and miscellaneous, . . . . .	194 98
street, macadam, gravel and miscellaneous, . . . . .	36 87
reet, macadam, . . . . .	27 12
street, gravel and miscellaneous, . . . . .	1,077 39
od street, gravel, . . . . .	56 36
treet, gravel and miscellaneous, . . . . .	38 64
street, macadam and inlets, . . . . .	25 10
reet, macadam, . . . . .	23 43
c avenue, gravel and miscellaneous, . . . . .	26 26
reet, macadam, . . . . .	37 24
ld street, macadam, gravel, miscellaneous and inlets, . . . . .	201 01
ee road, gravel and miscellaneous, . . . . .	173 90
t street, gravel, . . . . .	25 05
n street, macadam and inlets, . . . . .	39 02
street, gravel, . . . . .	59 57
street, macadam, . . . . .	25 81
street, macadam, miscellaneous and inlets, . . . . .	21 88
street, macadam, miscellaneous and inlets, . . . . .	32 53
street, macadam, . . . . .	76 20
ield street, macadam and gravel, . . . . .	86 75
reet, macadam, miscellaneous and inlets, . . . . .	1,731 11
es avenue, macadam, gravel, miscellaneous and inlets, . . . . .	390 82
ridge street, macadam and miscellaneous, . . . . .	22 34
r street, macadam, gravel, miscellaneous and inlets, . . . . .	33 52
r avenue, macadam, gravel, miscellaneous and inlets, . . . . .	272 93
streets, miscellaneous, on which sums less than 0.00 have been expended, . . . . .	1,490 35
street, macadam, . . . . .	65 49

Thomas street, inlets, . . . . .	\$59 46
Tinkham road, gravel and miscellaneous, . . . . .	59 06
Tyler street, gravel, . . . . .	79 26
Union street, macadam, . . . . .	83 87
Walnut street, macadam and inlets, . . . . .	407 18
Waltham avenue, gravel, . . . . .	27 09
Warner place, gravel, . . . . .	29 52
Water street, macadam, miscellaneous and inlets, . . . . .	376 11
Westminster street, gravel and inlets, . . . . .	28 02
White street, macadam, gravel and miscellaneous, . . . . .	37 07
Wilbraham avenue, gravel, . . . . .	33 05
Wilbraham road, macadam, gravel, miscellaneous and inlets, . . . . .	1,122 77
William street, macadam and gravel, . . . . .	23 11
Willow street, macadam and miscellaneous, . . . . .	104 76
Worcester street, I. O., gravel, miscellaneous and inlets, . . . . .	91 02
Worthington street, macadam, miscellaneous and inlets, . . . . .	306 95
	<hr/>
	\$19,474 90

## WALKS. AND CURBS.

Street.	Material.	Description.	Length in feet 4" curb.	Length in feet 6" curb.
Alden street,	Brick	Relaid		
Armory street,			194	
Autumn street,	Brick	New	372	
Bay street,	Brick and tar concrete	Relaid and recoated		
Belmont avenue,	Brick and tar concrete	New	1,679	
Bowdoin street,	Brick	New	36	
Bowles street,	Tar concrete	New and recoated	750	
Broad street,	Brick	Relaid		
Central street,	Brick	Relaid		
Charles street,	Brick	New	273	
Dickinson street,	Brick and tar concrete	New	1,940	
Florida street,			255	
Franklin street,	Brick	New	1,145	
Fulton street,				901
Hall street,			1,424	
Hampden street, I. O.,				
Hancock street,	Brick	Relaid		

# REPORT ON STREETS.

17

	Material.	Description.	Length in feet 4" curb.	Length in feet 6" curb.
,	Brick	Relaid		
ove street,	Brick	New	42	
,	Tar concrete	New	785	
et,				56
,				103
, I. O.,			4,856	
venue,			6	
street,				31
I. O.,			76	
reet,			477	
street,			34	
reet,			534	
venue,	Brick	Relaid		
,	Brick	Relaid		
reet,	Brick	Relaid		
venue,	Tar concrete	New	2,973	
reet,	Brick	Relaid		
street,			51	
st,			6	
reet,	Brick	Relaid		
reet,	Brick	Relaid	195	
ue,			961	
reet,			77	
road,	Brick	New	1,045	
on street,	Cement concrete	New		13
			20,863	1,104

## STREETS MADE PUBLIC.

Limits.	Length in feet.
, Cambridge to Oak Grove avenue, . . . . .	380
alth avenue, Belmont avenue to Washington street, . . . . .	1,430
place, Worthington to Alert street, . . . . .	243
treet, Warwick avenue to Liberty street, . . . . .	250
reet, Sumner avenue, to Maplewood terrace, . . . . .	283
, Logan street to Westford avenue, . . . . .	889
reet, Wilbraham road, southerly, . . . . .	1,475
	<hr/> 4,950

## STREETS RELOCATED.

	Length in feet.	Width in feet.
Carew street, Liberty street to St. James avenue, in part, . . . . .	3,600	66
High street, Maple to Walnut street, . . . . .	2,600	33 to 40
North Main street, westerly line opposite Morgan street, . . . . .	436	
St. James avenue, Highland Division, N. Y., N. H. & H. R. R., to B. & A. R. R., . . . . .	1,666	66
Worcester street, I. O., Railroad under pass., Athol Branch, B. & A. R. R., to Front street, . . . . .	3,010	60
	<hr/> 11,312	

## INVENTORY.

## STREET AND SEWER DEPARTMENTS.

City yard and barns, Lyman street, . . . . .	\$12,800 00
Logan street yard, . . . . .	7,000 00
Trap rock quarry, Westfield, . . . . .	225 00
Engine, engine house, trap rock crusher and tools, . . . . .	1,700 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Island pond, . . . . .	380 00
Gravel bank, Boston road, . . . . .	80 00
Six steam rollers, . . . . .	13,450 87
Building for roller storage and repairs, . . . . .	1,277 82
Sixteen horses, wagons, sleighs, harness, etc., . . . . .	5,642 60
Thirty-four water carts, . . . . .	4,518 08
Tools and road materials, . . . . .	15,136 15
	<hr/> \$62,310 52

Information as to quantities and costs of all work done may be found on other pages of this report. The building of Peconic avenue was probably the most important work done by the department during the year, as this, together with the raising of the South End bridge and the work done by the New York, New Haven and Hartford Railroad Company, the abolition of the South End grade crossing,

rious danger to the traveling public. It is expected that the total cost of this work to the city of Springfield will be 10 per cent of the cost of all the work done under the grade crossing acts of the legislature, the balance being borne by the New York, New Haven and Hartford Railroad Company and the state of Massachusetts.

The creosote wood blocks laid in Main street in the year 1901 were removed and the so-called grooved blocks, similarly treated, were substituted for the purpose of insuring better foothold for horses. The cost of labor for substituting the grooved blocks was borne by the United States Wood Preserving Company of New York. Parts of Main street north and south of, and in area corresponding to, that above referred to, were paved by departmental labor, with the blocks which were removed, together with a quantity of new blocks sufficient to compensate for the loss due to breakage. The blocks on the westerly side of Main street, between Lyman and Hampden streets, were laid on a concrete base as usual, but instead of a sand cushion one of cement mortar was used, and while slight additional expense was incurred, it is expected that much better results will be attained.

The area of streets which has been macadamized is about 75 per cent greater and the area paved with more permanent materials is somewhat less than those paved with corresponding materials last year.

Among other numerous and necessary improvements, it is hoped that Main street, between Hampden and State streets, may be repaved with a different and more suitable material during the coming year, as the granite blocks with which this portion of the street is now paved, present a surface highly objectionable to travel and one extremely difficult to maintain in a clean and sanitary condition.

The amount of work done under the Walk and Curbing appropriation has not been as large as in the years immediately preceding, and larger appropriations therefor are recommended

in the future. Public convenience and necessity and the lessening of the city's liability in cases of accidents to pedestrians render imperative the repairing of a large number of walks.

The lengths of streets which have been watered aggregate a total of 77 miles, an increase over the mileage of the year 1902 of 2.45 miles; of this amount about 14 miles have been watered by cars under contract with the American Car Sprinkler Company of Worcester, Massachusetts.

It gives me pleasure to express thanks to Michael Roane and Arthur H. Woodward, first and second assistants.

I would also express my appreciation of the uniform courtesies extended during the year by Mayor Everett E. Stone, Alderman Francke W. Dickinson, and Councilman William C. Bartlett, members of the Board of Supervisors of Highways and Bridges.

Respectfully submitted,

ARTHUR A. ADAMS,  
*Superintendent of Streets.*

BOARD OF ALDERMEN, December 28, 1903.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 28, 1903.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 28, 1903.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 28, 1903.

Approved.

E. E. ST

## TABLE OF MACADAMIZED STREETS.

Includes macadam laid by Spfd. Street Ry. Co.

Macadam laid by Spfd. Street Ry. Co.

Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutters in sq. yds.
1st avenue,		1,088	3,385	
2nd street,		1,003	3,193	138
3rd street, Pecousic avenue to				
4th street,		230	383	
5th street,		2,776	*9,306	
6th street,		414	1,380	
7th street, Mill to Randall avenue,		2,253	*7,599	336
8th street,		663	2,094	
9th street, State to Burr,		1,008	3,213	
10th street,		437	1,222	
11th street, Federal to Worthington,		793	3,240	
12th street,		1,378	4,592	
13th street,		787	1,942	
14th street,		197	504	
15th place,		644	2,538	
16th place,		67	319	67
17th street		1,435	4,865	
18th street,		180	561	
19th street, St. James avenue to High-				
20th division N. Y., N. H. & H. R. R.,		4,053	12,960	
21st street,		528	1,303	
22nd street, Woodside avenue to				
23rd street,		2,599	7,043	
24th street, Oakland street to				
25th street,			**5,344	45
26th street, State to Oak, I. O.,			**31,291	
27th street, Water to Main,		958	2,418	635
28th street,		1,629	5,112	
29th street, St. James avenue to				
30th Worthington street,		1,152	3,837	
31st street,		1,807	864	
32nd street,		862	2,921	14
33rd street, old toll bridge to Main,				
34th Dwight to Chestnut,		1,310	3,566	1,189
35th street,		959	3,177	



NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutter in sq.
Brookline avenue,		615	2,050	
Butler street,		1,525	2,223	
Byers street, State to Frost,		480	1,088	
Carew street, Main to a point near Bartlett,		2,618	5,373	
Calhoun street,		1,129	3,435	
Cass street, Liberty to Butler,		1,762	5,407	
Catharine street, Bay to Dartmouth,		150	493	
Cedar street,		1,962	6,613	
Central street,		4,903	10,357	
Central street, Cedar to Pine,			**533	
Charles street, Liberty to Franklin,		618	1,888	
Chestnut street, State to Worthington, and east side, Allendale to City Hospital,		3,889	8,156	
Chestnut street, Allendale to Springfield,			**2,908	
Church street,		832	2,553	
Churchill street,		575	1,919	
City Hall passageways,		557	1,004	
Clarendon street, north from Worth- ington,		204	674	
Clinton street,		703	1,842	
College street,		527	1,522	
Congress street,		1,550	3,753	
Court street, Water to Court Square avenue,		689	1,492	
Cross street, Willow to Maple,		608	912	
Cypress street,		651	1,746	
Dale street,		812	1,973	
Dartmouth street,		1,132	5,159	
Demond avenue,		859	2,863	
Eagle street,		556	1,855	
East Court street, Market to Dwight,		369	608	
East Hooker street,		679	1,786	
Eastern avenue,		4,516	*15,297	
Edwards street,		675	2,219	
Elliott street,		1,007	2,681	
Elm street, N. Y., N. H. & H. R. R. to Court Square,		818		

OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutters in sq. yds.
1 street, . . . . .		886	2,738	
street, . . . . .		648	1,541	565
reet, . . . . .		1,606	5,143	
street, . . . . .		1,500	4,056	803
street, Pearl to Worthington,		353	1,370	
reet, Main to foot of hill,		1,357	2,270	1,171
nue, Talcott to Wason, . .		1,126	5,005	
street, Walnut to Pine, .		1,582	5,273	
street, Bay to Worthington, .		1,407	4,666	
'ark avenue, Sumner to Forest				
et, . . . . .		752	3,846	
asant avenue, west side, .		2,794	9,230	908
1 street, Main to Charles and				
s to Webster, . . . . .		2,531	7,543	1,238
street, . . . . .		778	2,593	
street, . . . . .		3,569	10,986	107
street, Water to Main, . .		1,114	3,713	
street, . . . . .		1,577	5,220	
street, Maple easterly, . .		110	609	38
ood street, . . . . .		1,561	5,025	
reet, . . . . .		612	1,734	
or street, . . . . .		738	2,286	
on street, . . . . .		607	1,866	535
street, Florence to State, .		3,429	*11,613	
l street, Yale to St. James				
nue, . . . . .		883	2,933	
rn street, . . . . .		540	1,374	
street, . . . . .		698	2,204	
street, Walnut to Eastern ave-				
, and Alden street easterly, .		2,386	5,926	498
street, . . . . .		647	1,582	219
street, . . . . .		776	2,001	
street, N. Y., N. H. & H. R. R.				
Main street, . . . . .		1,277	3,627	699
d avenue, . . . . .		568	1,063	
n avenue, . . . . .		1,275	6,375	
reet, . . . . .		640	2,136	
reet, Walnut to Highland divi-				
n N. Y., N. H. & H. R. R., .		2,885	*9,507	

NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area gravel in sq.
Lebanon street, . . . . .		1,926	5,233	
Liberty street, Main street easterly, and Wolcott to Carew, . . . . .		3,808	9,002	
Liberty street, Heywood avenue to Chicopee line, . . . . .			**9,920	
Linden street, . . . . .		1,287	4,099	
Locust street, . . . . .		793	1,887	
Lombard street, . . . . .		590	1,677	
Loring street, . . . . .		707	2,294	
Lyman street, Chestnut to Spring, . .		734	2,487	
Madison avenue, . . . . .		529	1,358	
Magazine street, Lincoln to Armory, .		734	2,434	
Main street, Mill river to Locust street,		980	4,861	
Main street, I. O., Oak to point 104 ft. east of Rogers avenue, . . . . .		3,403	11,630	
Main street, I. O., Oak to Ludlow bridge, . . . . .			**9,979	
Maple street, State to Central, and top of hill to George street, . . . . .		3,721	8,488	
Marble street, . . . . .		1,074	3,508	
Margaret street, Water to Main, . .		842	2,807	
Market street, . . . . .		961	1,376	
Massasoit street, Carew to Prospect, .		851	2,803	
Mattoon street, . . . . .		524	1,425	
Merwin street, . . . . .		713	2,377	
Mill street, Main to Dickinson, . . .		3,250	12,533	
Morgan street, . . . . .		852	2,914	
Morris street, . . . . .		1,022	3,031	
Mulberry street, Maple to Ridgewood place, . . . . .		991	2,619	
Myrtle street, . . . . .		484	997	
North street, Carew to Waverly, . . .		2,988	10,807	
North Main street, Carew to Chicopee line, . . . . .		7,115	22,228	
Norwood street, . . . . .		1,117	2,911	
Oak street, . . . . .		1,344	4,069	
Oak street, I. O., Berkshire to Main,		1,097	3,588	
Oak street, I. O., Berkshire to Main, .				

NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutters in sq. yds.
and street, Belmont avenue to				
ickinson, . . . . .		888	2,782	
street, . . . . .		478	1,248	
s street, . . . . .		1,509	4,293	
l street, . . . . .		890	2,948	
r avenue, . . . . .		991	3,177	
street, Main to Willow, and foot				
hill to Maple, . . . . .		865	2,066	479
street, . . . . .		1,631	5,294	144
street, Chestnut to Byers, . . .		1,220	2,699	814
sic avenue, South street to South				
reet, . . . . .		2,205	7,350	
ston avenue, . . . . .		2,582	6,375	170
treet, . . . . .		4,420	13,813	531
ield street, B. & M. R. R. to West				
reet, and Lowell to Washburn, .		655	2,131	150
ield street, Washburn to Wason				
venue, . . . . .			**3,953	
nt street, . . . . .		428	1,026	
uth street, . . . . .		479	1,597	
ston street, Bay to St. James				
venue, . . . . .		1,509	6,329	
ston street, Bay to St. James				
venue, . . . . .			**1,496	
ion street, . . . . .		868	2,148	662
old street, . . . . .		730	2,432	
nd avenue, . . . . .		277	926	
dge avenue, . . . . .		516	1,599	
street, Mattoon to Spring, . . .		522	1,078	348
rd street, Market to Dwight, . .		367	990	288
ant street, . . . . .		860	3,126	
l street, . . . . .		1,415	4,535	62
th street, . . . . .		822	2,529	
n street, . . . . .		1,200	3,895	
on street, Birnie avenue to N. Main,		651	2,027	
nan street, State to Bay, . . .		1,528	5,078	
street, Agawam street to Mill				
liver, . . . . .		1,863	6,503	375
g street, . . . . .		2,373	5,986	1,336

NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutters in sq. yds.
Springfield street, Chestnut to dingle, and Hamburg st. to Chicopee line,			**1,242	
Spruce street, . . . . .		699	1,737	
State street, Water to Main, City Li- brary to Federal, and Oak to Berk- shire, . . . . .		19,786	*68,628	3,695
Stearns Park avenue, east of Park, . .		259	461	
St. James avenue, State to Highland division N. Y., N. H. & H. R. R., . . .		5,470	15,557	
St. James avenue, State to end of track,			**5,213	
Stockbridge street, . . . . .		635	1,269	348
Summer street, east of Spring, . . .		567	1,134	378
Summer avenue, Long Hill street to Forest Park entrance, . . . . .		3,215	15,227	
Summer avenue, Long Hill street to White, . . . . .			**11,631	
Taylor street, . . . . .		1,183	2,844	1,046
Temple street, . . . . .		953	2,570	
Tenth street, . . . . .		1,577	4,324	127
Thompson street, . . . . .		2,093	6,606	
Townley avenue, . . . . .		138	153	61
Union street, Water to foot of hill, Maple to School, and Mulberry to Eastern avenue, . . . . .		6,088	19,425	453
Vernon street, . . . . .		823	1,407	545
Vine street, . . . . .		745	1,892	
Vinton street, . . . . .		612	2,038	427
Walnut street, Mill to Pendleton avenue,		3,142	*5,450	1,115
Warriner avenue, . . . . .		450	1,601	
Wason avenue, B. & M. R. R. to North Main street, . . . . .		505	1,718	
Wason avenue, B. & M. R. R. to North Main street, . . . . .			**449	
Water street, . . . . .		5,145	13,546	2,979
Waverly street, . . . . .		850	2,910	
Webster street, . . . . .		606	2,020	
West street, . . . . .		1,195	3,872	
White street, Allen to Orange, . . .		1,800		

NAME OF STREETS.	Limits.	Length in feet.	Area of macadam in sq. yds.	Area of gutters in sq. yds.
White street, Orange to Sumner avenue, and Belmont avenue to Long- meadow line, . . . . .			**3,774	
Wilbraham road, State to Homer st., .		2,579	11,427	
Wilbraham road, Westford avenue to point 660 ft. east of Benton street,			**3,682	
Wilcox street, Water to Main, . . .		922	3,016	
William street, N. Y., N. H. & H. R. R. to Main, . . . . .		1,368	4,359	
Willow street, Union to State, . . .		895	1,862	631
Winthrop street, . . . . .		659	2,397	
Worthington street, Water to Main and Spring to St. James avenue, . . .		4,284	*5,495	1,298
Yale street, Dartmouth to Princeton, .		863	2,886	
York street, . . . . .		1,000	2,997	
Total, . . . . .		262,577	880,786	48,556

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Belmont avenue,	point 400' east of Woodside avenue to Hall,	Catskill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	150	376	1903
Chestnut street,	Lyman to B. & A. R. R. location,	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. location to Linden,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Lyman to Worthington,	Granite blocks,	472	1,673	1895
Court street,	Main to Court Square avenue,	Rock asphalt,	317	1,277	1897
Court street,	east of Court Square avenue,	Syracuse brick,	174	174	1897
Court Square avenue,	Court to Elm,	Rock asphalt,	193	503	1897
Court Square avenue,	Court to Elm,	Syracuse brick,		380	1897
Dwight street,	State to Lyman,	Syracuse brick,	2,324	9,905	1896
East Court street,	Main to Market,	Rock asphalt,	117	297	1900
Elm street,	Main to Court Square avenue,	Rock asphalt,	343	949	1897
3rd street,	Main to Court Square avenue,	Syracuse brick,		380	1897
Fort street,	Main to Water,	Granite blocks,	670	1,770	1895
Larrison avenue,	Main to Dwight,	Trinidad asphalt,	586	2,247	1896
Liberty street,	Chestnut to Cass,	Syracuse brick,	1,399	4,571	1900
Liberty street,	Cass to Heywood avenue,	Syracuse brick,	1,147	3,971	1901
Lyman street,	Main to Chestnut,	Granite blocks,	1,305	4,599	1899

TABLE OF PAVED STREETS.—Continued.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	west side, Elm to Court,	Granite blocks,		432	1887
Main street,	State to Bridge,	Granite blocks,	1,550	5,857	1888
Main street,	Bridge to Hampden,	Granite blocks,	634	1,328	1889
Main street,	Liberty to Cypress,	Granite blocks,	270	502	1890
Main street,	State street junction,	Granite blocks,	80	250	1890
Main street,	between railway tracks, State to Hampden,				
Main street,	Cypress to point near Franklin,	Granite blocks,	650	1,008	1890
Main street,	State to Bliss,	Granite blocks,	235	3,381	1891
Main street,	Bliss to William,	Syracuse brick,	1,148	1,315	1893
Main street,	William to Marble,	Granite blocks,	1,762	5,475	1893
Main street,	Marble to Locust,	Syracuse brick,	840	8,307	1896
Main street,	east side, point near Franklin to Carew,	Syracuse brick,		4,381	1897
Main street,	west side, Emery to Sergeant,	Syracuse brick,	1,302	4,605	1897
Main street,	west side, Hampden to Lyman,	Catskill blocks,	1,447	5,449	1901
		Creo-resinate wood blocks,		396	1903
Main street,	east side, Worthington to Lyman,	Creo-resinate wood blocks,			
		Grooved creo-resi- nate wood blocks,	535	1,341	1903
Main street,	east side, Lyman to Liberty,				
		Creo-resinate wood blocks,	484	2,780	1903
Main street,	east side, Liberty to Sharon,				
			453	1,135	1903



TABLE OF PAVED STREETS.—*Concluded.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	crossing through green opposite Pat- ton street,	Catakill and Metro- politan blocks,		168	1903
Plainfield street,	Main to Fulton,	Syracuse brick,	1,710	10,249	1902
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main to library,	Granite blocks,	1,019	4,084	1890
State street,	widened Dwight to Chestnut,	Granite blocks,		217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
Summer street,	Autumn to Kibbe avenue,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,				
Walnut street,	State to Union,	Granite blocks,	787	2,635	1901
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	638	2,144	1899
White street,	Allen to Orange,	Syracuse brick,	878	3,140	1900
Worthington street,	Main to Dwight,	Syracuse brick,	1,610	2,400	1902
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	739	2,544	1896
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	1,060	3,869	1901
			269	1,003	1903
			39,805	146,151	

# THIRTY-FIFTH ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1903.

To the *Mayor and Board of Aldermen*.—

I have the honor of presenting statements of receipts and expenditures of the Sewer Department and descriptions of work done during the financial year ending December 10, 1903.

### RECEIPTS.

By appropriation, .....	\$30,000 00
Sewer entrances, fees, .....	8,522 04
Sewer entrances, for labor and materials, .....	2,731 31
From individuals for payment in part of the costs of constructing the State street and Roseland street sewers, .....	1,400 00
From other departments and private parties, ..	1,474 12
	\$44,127 47

### EXPENDITURES.

#### REGULAR.

Building and connecting private drains, .....	\$2,586 48
City teams, uncredited balance, .....	34 33
City yard, .....	961 00
Cleaning and repairs, .....	3,048 59
Office and general expense, .....	1,916 14
Flushing, .....	2,048 86
Materials on hand, .....	563 93
Engineering, .....	341 57
Amount carried forward,	\$11,500 90

Amount brought forward,	\$11,500 90
Sewer construction, .....	28,394 89
Supplies, .....	92 21
Tools, .....	369 82
Labor and material charged to other departments, .....	847 07
Labor and material charged to private parties,...	715 34
Transferred to Walks and Curbing,.....	1,000 00
	<hr/>
	\$42,920 23
Unexpended balance, .....	1,207 24
	<hr/>
	\$44,127 47

## UNDER SPECIAL APPROPRIATION.

	Limit of Expendi- ture.	Expended prior to this year.	Expended since December 10, 1922.	Balance unex- pended.
Mill River valley sewer,...	\$52,300 00	\$51,593 65	\$433 29	\$273 06

## SEWER CONSTRUCTION CLASSIFIED.

448 feet of 8" vitrified clay pipe,.....	new construction
126 feet of 8" vitrified clay pipe,.....	reconstruction
3,260 feet of 10" vitrified clay pipe,.....	new construction
1,749 feet of 12" vitrified clay pipe,.....	new construction
825 feet of 12" vitrified clay pipe,.....	reconstruction
452 feet of 15" vitrified clay pipe,.....	new construction
727 feet of 15" vitrified clay pipe,.....	reconstruction
78 feet of 15" cement pipe,.....	reconstruction
812 feet of 18" vitrified clay pipe,.....	new construction
1,319 feet of 18" vitrified clay pipe,.....	reconstruction
343 feet of 20" vitrified clay pipe,.....	new construction
133 feet of 20" vitrified clay pipe,.....	reconstruction
154 feet of 24" vitrified clay pipe,.....	new construction
373 feet of 1'-10" x 2'-9" brick sewer,.....	new construction
417 feet of 2'-0" x 3'-0" brick sewer,.....	new construction
1,124 feet of 2'-2" x 3'-3" brick sewer,.....	new construction
287 feet of 2'-4" x 3'-6" brick sewer,.....	new construction
29 feet of 2'-8" x 4'-0" brick sewer,.....	new construction
442 feet of 3'-4" x 6'-8" brick sewer,.....	reconstruction
359 feet of 3'-4" x 7'-2" brick sewer,.....	reconstruction

## SEWER CONSTRUCTION ITEMIZED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
st., south from Springfield st.	Clay	31 146	20" } 18" }	\$317 00
ce., south from Douglas st..	Brick	373	1'-10" x 2'-9" } egg shaped }	1,319 73
ce., south from Thomas st..	Clay	312 316	20" } 18" }	768 74
flush gate....	....	....	....	11 00
ctory Pond, High School to ate st .....	Clay	88	24"	192 35
., east from Armory st....	Clay	1,101 448	10" } 8" }	767 46
ry Brook, east from Morris st.	Clay	66	24"	184 73
st., east and west from Maple ., relaying .....	Clay	769	18"	1,211 88
t st., south from Carew, re- ying .....	Clay	126	8"	100 68
t st., south from Douglas st.	Clay	450	10"	385 61
s st., east from Garden brook, relaying .....	Clay	133 198 369 288	20" } 18" } 15" } 12" }	1,463 00
nd st., west from Chestnut .....	Clay	167	10"	125 29
n st., manholes .....	....	....	....	176 65
s pl., north from Worthing- n st. ....	Clay	249	10"	220 66
n st., west from Tracy ave., laying .....	Clay Cem.	9 78	15" } 15" }	108 38
st., east from Cass st....	Clay	621 70	12" } 10" }	684 32
ton st., east from Birnie ave.	Clay	300 300	12" } 10" }	416 95

## SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
King st., manholes.....		.....	.....	\$8
Medford st., east from Birnie ave....	Clay	280 234	12" } 10" }	34
Mill st., catch basin.....		.....	.....	3
Mill River Valley Sewer.....	Brick	.....	.....	42
Orleans st., manhole.....		.....	.....	6
Parkwood st., catch basins.....		.....	.....	4
Patton st., east from Garden Brook, relaying.....	Clay	352 349 537	18" } 15" } 12" }	1,52
Plainfield st., Newland st. to Rose- land st.,.....	Brick	287 294	2'-4" x 3'-6" } 2'-2" x 3'-3" } egg shaped }	4,47
Portland st., east from Birnie ave....	Clay	251 224	12" } 10" }	33
*Roseland st., west from Plainfield st.	Clay	350 150	18" } 15" }	94
State st., Dwight st., easterly.....	Brick	29 265 417	2'-8" x 4'-0" } 2'-2" x 3'-3" } 2'-0" x 3'-0" } elliptical }	4,89
Silver st., east from Armory st.....	Clay	302 297	15" } 12" }	44
Sumner ave., extension east of White st.,.....	Brick	565	2'-2" x 3'-3" } egg shaped }	2,38
Thomas st., east from Birnie ave....	Clay	451	10"	38
Thompson st., manhole and flush gate.....		.....	.....	7
Tracy ave., south from Franklin st.,	Clay	14	10"	1

## SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
on st., flush gate.....		....	....	\$24 98
thington st., Bowdoin st. to Thompson st., reconstruction.	Brick	359 442	3'-4" x 7'-2" } 3'-4" x 6'-8" } egg shaped }	3,908 81
		13,457		\$28,828 18

Sewer not completed.

78 feet of original cement pipe relaid.

## SEWERS BUILT BY PRIVATE PARTIES.

LOCATION.	Material.	Length in Feet.	Size.	
ngton ave., south from Sumner ave.....	Clay	300 100	12" } 10" }	
dolph st., east from Maplewood terrace.....	Clay	250 251	12" } 10" }	
y ave., south from Franklin st..	Clay	262	10"	
		1,163		

## SEWERS ABANDONED—1903.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
tral st., west of Maple st.....	Cem.	195	18"	\$84 63
tral st., Maple st. to near Sterns terrace.....	Brick Cem.	480 183	1'-6" } 18" }	456 50
grass st., Garden Brook easterly.	Cem.	989	15"	1,012 41
aklin st., west from Tracy ave...	Cem.	87	15"	
on st., Garden Brook easterly...	Cem.	1,238	15"	
		3,172		\$1,553 54

## SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Con.
King st., manholes.....	.....	.....	.....	\$03
Medford st., east from Birnie ave....	Clay	280 234	12" } 10" }	349
Mill st., catch basin .....	.....	.....	.....	34
Mill River Valley Sewer.....	brick	.....	.....	433
Orleans st., manhole.....	.....	.....	.....	41
Parkwood st., catch basins.....	.....	.....	.....	46
Patton st., east from Garden Brook relaying .....	Clay	352 349 537	18" } 15" } 12" }	1,526
Plainfield st., Newland st. to Rose land st.....	brick	287 294	2'-4" x 3'-6" } 2'-2" x 3'-3" } egg shaped }	4,477
Portland st., east from Birnie ave....	Clay	251 224	12" } 10" }	327
*Roseland st., west from Plainfield st.	Clay	350 150	18" } 15" }	940
State st., Dwight st., easterly.....	brick	29 265 417	2'-8" x 4'-0" } 2'-2" x 3'-3" } 2'-0" x 3'-0" } elliptical }	4,897
Silver st., east from Armory st.....	Clay	302 297	15" } 12" }	449
Sumner ave., extension east of White st .....	brick	565	2'-2" x 3'-3" } egg shaped }	2,391
Thomas st., east from Birnie ave....	Clay	451	10"	538
Thompson st., manhole and flush gate .....	.....	.....	.....	75
Tracy ave., south from Franklin st..	Clay	14	10"	11

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Oak street, Indian Orchard,.....	\$11 12
Park street, .....	21 10
Peabody lane, .....	20 83
Pine street, .....	25 39
Plainfield street, .....	19 62
Sanford street, .....	50 85
Sargeant street, .....	16 43
State street, .....	100 33
Sundry sewers, cleaning connections,.....	211 50
Sundry sewers, flushing,.....	2,048 86
Sundry sewers, repairs, .....	180 36
Union street, .....	59 29
Waverly street, .....	19 53
Worthington street, .....	42 33

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\$5,097 45

For detailed information concerning the work done during the year, you are respectfully referred to preceding pages of this report. It might be stated, however, that all work has been done by departmental labor, although the building under contract of the Plainfield street sewer between Newland and Rose-nd streets was contemplated and bids therefor were submitted and opened by the Committee on Sewers and Drains on October 17. It was decided by this committee, however, after careful consideration, that the work should be done by departmental labor, hoping for a saving to the city. It is with pleasure that I announce that this procedure has resulted in a substantial reduction in the cost of the sewer.

It would seem advisable to relay the sewer in Worthington street between Kibbe avenue and Federal street, and also that High street, as their faulty conditions, upon examination, appear to warrant.

It would also seem advisable to extend the Mill River valley sewer as far as finances will permit during the coming year, pursuing the policy heretofore followed of distributing the



cost over a period of years. The cost of this sewer to date has been \$57,747.82, divided as follows:—

1899,	\$5,720 88	1902,	\$3,119 56
1900,	31,704 73	1903,	433 29
1901,	16,769 36		

It will be necessary to expend a considerable sum of money in filling the Garden Brook sewer in Main street between Worth- ington and State streets, provided Main street is repaved between Hampden and State streets during the coming year.

The estimated cost of completing the sewer work, which has been ordered by the Board of Aldermen and approved by the Mayor, is \$26,525.

It gives me pleasure to express thanks to Michael Roane, Assistant Superintendent of Streets and Sewers, who has had general oversight over sewer work, for his valuable assistance, and to Aldermen Dickinson, Greenleaf and Ford, members of the Committee on Sewers and Drains for the uniform courtesies they have extended during the year.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets and Sewers.*

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BOARD OF ALDERMEN, December 28, 1903.  
, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk*.

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COMMON COUNCIL, December 28, 1903.  
l and concurred.

H. S. GILBERT, *Clerk*.

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sent to the Mayor for approval, December 28, 1903.

E. A. NEWELL, *City Clerk*.

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FOR'S OFFICE, SPRINGFIELD, MASS., December 28, 1903.  
proved.

E. E. STONE, *Mayor*.

# CITY OF SPRINGFIELD,

SEWER CONSTRUCTION TO DECEMBER 10, 1903.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., west from Fisk ave	301	15"	Clay	\$4
	275	12"	"	
Acushnet ave., east from Main st .....	294	20"	"	2
	279	18"	"	
	271	15"	"	
	26	12"	"	
Adams st., Town brook to Main st .....	149	18"	"	\$322.22
east from Town brook....	890	....	Brick	66.68
Alden st., Hancock to East- ern ave .....	595	18"	Cem.	1,529.54
	820	15"	"	
Eastern ave., to Wilbraham ave .....	895	15"	Clay	911.39
easterly from Wilbraham ave .....	499	10"	"	250.86
Alderman st., easterly from Dickinson st .....	296	18"	"	9
	304	15"	"	
	300	12"	"	
	137	10"	"	
Alexander st., east from North st.	288	10"	"	1
Alfred st., east from Birnie ave.	377	10"	"	..
Allen ave., easterly from Allen st	338	10"	"	2
Allen st., Mill river to Randall ave .....	902	24"	"	2,408.92
	383	18"	"	1,598.59
	474	15"	"	
	580	12"	"	
	1,603	12"	"	
extension easterly .....	1,603	12"	"	881.58
extension east to Plum Tree road .....	1,401	10"	"	984.62
Allendale st., east from North st.	272	12"	"	5,8
	340	10"	"	
Amaron st., south from State st.	349	10"	"	4
Amherst st., north from Harvard	441	12"	Cem.	74.90
	25	10"	Clay	
Princeton to Monmouth....	512	12"	"	23.78
	191	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Andrew st., north from Boston road .....	463 422 382 398	20" 18" 12" 12"	Clay " } " } " }	\$1,753.67
Arbor st., Butler to Carew....				
Armory Hill sewer from Ar- mory st., through private grounds to Worthington..	150 900 249	2'-5"x3'-7 $\frac{1}{2}$ " 2'-8"x4'-0" 2'-1"x3'-1 $\frac{1}{2}$ "	Brick } " } " }	
Armory st., north from Lib- erty .....	450 476	1'-10"x2'-9" 1'-8"x2'-6"	" } " }	\$2,439.42
north from brick sewer to Carew st.....	156 267 290	24" 20" 12"	Clay } " } " }	975.77
north from culvert north of B. & A. R. R.....	690 360 271	15" 12" 10"	" } " } " }	1,165.47
south from Springfield st...	31 146	20" 18"	" } " }	317.00
south from Summer.....	374	12"	"	384.78
south from Worthington...	570	15"	Cem.	658.06
				5,940.50
Ashley st.....	65 580 697	18" 15" 12"	" } " } " }	80.45 1,453.92
Auburn st.....	397 335	12" 10"	Clay } " }	1,534.37 655.06
Autumn st., Summer to Worth- ington .....	239	15"	"	715.29
Bancroft st., Garden brook to Chestnut st.....	1361	3'-4"x5'-0"	Brick	8,914.04
including Chestnut st., Ban- croft to Montmorenci...	379	3'-2"x4'-9"	"	
Montmorenci st., east from Chestnut.....	43	3'-2"x4'-9"	"	
Bay st., Bowles to Cambridge	1,037	2'-8"x4'-0"	"	
	360	2'-2"x3'-3"	"	8,056.62
east from Cambridge.....	247	8"	Clay	46.75
Sherman to Clarendon.....	151	8"	Cem.	46.82
Florida to Sherman.....	304 377 812	20" 18" 15"	Clay } " } " }	1,092.89 945.16 321.02
Florida to Pleasant .....	235	12"	"	715.01
St. James ave. to Pleasant..	250 245 228	15" 12" 10"	" } " } " }	
Catharine to Clarendon ....	194	10"	"	200.66
				11,424.93

# CITY OF SPRINGFIELD,

SEWER CONSTRUCTION TO DECEMBER 10, 1903.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., west from Fisk ave	301	15"	Clay	\$42
	275	12"	"	
Acushnet ave., east from Main	294	20"	"	29
st .....	279	18"	"	
	271	15"	"	
	26	12"	"	
Adams st., Town brook to Main	149	18"	"	\$322.22
st .....	890	....	Prick	66.68
east from Town brook...				58
Alden st., Hancock to East-	595	18"	Cem.	1,529.54
ern ave .....	820	15"	"	
Eastern ave., to Wilbraham	895	15"	Clay	911.39
ave .....				
easterly from Wilbraham	499	10"	"	250.86
ave .....				2.69
Alderman st., easterly from	296	18"	"	91
Dickinson st. ....	304	15"	"	
	300	12"	"	
	137	10"	"	
Alexander st., east from North st.	288	10"	"	18
Alfred st., east from Birnie ave.	377	10"	"	29
Allen ave., easterly from Allen st	338	10"	"	
Allen st., Mill river to Randall	902	24"	"	2,408.92
ave .....	383	18"	"	
	474	15"	"	1,598.59
	580	12"	"	
extension easterly .....	1,603	12"	"	881.58
extension east to Plum Tree				
road .....	1,401	10"		984.62
Allendale st., east from North st.	272	12"	"	5.87
	340	10"	"	
Amaron st., south from State st.	349	10"		40
Amherst st., north from Harvard	441	12"	Cem.	74.90
	25	10"	Clay	
Princeton to Monmouth, ...	512	12"	"	23.78
	191	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Andrew st., north from Boston road .....	463 422 382	20" 18" 12"	Clay " } "	\$1,753.67
Arbor st., Butler to Carew....	398	12"	"	
Armory Hill sewer from Ar- mory st., through private grounds to Worthington..	150 900 249	2'-5" x 3'-7½" 2'-8" x 4'-0" 2'-1" x 3'-1½"	Brick " } "	5,318.04
Armory st., north from Lib- erty .....	450 476	1'-10" x 2'-9" 1'-8" x 2'-6"	" } "	
north from brick sewer to Carew st. ....	156 267 290	24" 20" 12"	Clay " } "	975.77
north from culvert north of B. & A. R. R. ....	630 360 271	15" 12" 10"	" } " } "	
south from Springfield st...	31 146	20" 18"	" } "	317.00
south from Summer .....	374	12"	"	
south from Worthington...	570	15"	Cem.	658.06
Ashley st. ....	65 580 697	18" 15" 12"	" } " } "	1,534.37
Auburn st. ....	397 335	12" 10"	Clay " } "	
Autumn st., Summer to Worth- ington .....	239	15"	"	715.29
Bancroft st., Garden brook to Chestnut st. ....	1361	3'-4" x 5'-0"	Brick	8,914.04
including Chestnut st., Ban- croft to Montmorenci..	379	3'-2" x 4'-9"	"	
Montmorenci st., east from Chestnut .....	43	3'-2" x 4'-9"	"	
Bay st., Bowles to Cambridge	1,037 360	2'-8" x 4'-0" 2'-2" x 3'-3"	" } "	8,056.62
east from Cambridge .....	247	8"	Clay	
Sherman to Clarendon .....	151	8"	Cem.	
Florida to Sherman .....	304 377 812	20" 18" 15"	Clay " } "	1,092.89
Florida to Pleasant .....	235	12"	"	
St. James ave. to Pleasant..	250 245 228	15" 12" 10"	" } " } "	715.01
Catharine to Clarendon ....	194	10"	"	
				200.66
				11,424.93

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Beacon st., Eastern ave. to				
Colton st. ....	250	10"	Clay	\$119.21
east from Colton..	124	8"	"	3.65
Beaudry st., I. O., southerly	300	12"	"	\$122.86
from Main st. ....	270	10"	"	
Beaumont st., north from Bel-				
mont ave. ....	250	12"	"	403.87
	431	10"	"	
Beech st., north from Cen-				
tral. ....	410	10"	Cem.	74.20
Beechwood ave., Sumner to				
Spruceland ave. ....	595	12"	Clay	19.00
Belgrade pl., west fr. Walnut st.	220	8"	"	
	140	6"	"	
Bellevue ave., easterly from				
Belmont ave. ....	300	18"	"	
	300	15"	"	
	194	12"	"	
westerly from Dickinson st.	744	10"	"	
Belmont ave., Mill river to				
brick sewer. ....	954	20"	"	4,150.20
east from end of brick sewer				
to Kenwood Park. ....	432	20"	"	
	493	18"	"	842.40
extension to Sumner ave. ...	301	15"	"	
	403	12"	"	
	616	10"	"	8,179.57
southerly from Sumner ave.,	830	3'-4"x5'-0"	Brick	
	819	3'-0"x4'-6"	"	
east from Fort Pleasant ave.	90	10"	Clay	93.92
from top of hill to just east				
of Litchfield st. ....	660	2'-0"x3'-0"	Brick	11,750.19
	445	1'-10"x2'-9"	"	
	595	1'-8"x2'-6"	"	
	550	1'-6"x2'-3"	"	
Belmont court. ....	216	10"	Clay	146.75
Benton st., south from State..	301	12"	"	
	300	10"	"	513.96
	247	8"	"	
extension southerly. ....	320	8"	"	419.68
Berkeley st., Princeton to Mon-				
mouth. ....	483	12"	"	303.64
Berkshire st., I. O., Oak to				
Myrtle. ....	701	12"	Cem.	946.21
east from Chestnut. ....	577	12"	Clay	545.74
Besse place, west from Main st.	290	10"	"	1,491.95

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Birnie ave., north from Worcester st., sewer extension to Grace st.....	162	15"	Cem.	...
south from Worcester st., sewer extension to Walter st.....	144	12"	"	....
north from Wason ave.....	362	24"	Clay	\$579.11
south from Wason ave.....	350	18"	"	1,024.75
	417	15"	"	
north from Arch st.....	1,048	24"	"	....
north from Douglas st....	292	24"	"	1,149.93
	303	20"	"	
	304	15"	"	
	144	10"	"	
south from Douglas st.....	373	1'-10"x2'-9"	Brick	1,319.73
south from Thomas st. ....	312	20"	Clay	768.74
	316	18"	"	\$4,842.26
Bliss st., from Main to N. Y. N. H. & H. R. R.....	1,284	12"	Cem.	1,150.71
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).....	203	12"	"	....
Bond st., east from Garden brook sewer .....	341	2'-0"x3'-0"	Brick	1,580.25
end of brick sewer to Chestnut st. ....	959	24"	Clay	2,195.84
				3,776.09
Bowdoin st., south from Worthington .....	673	15"	Cem.	740.00
Worthington to Ingersoll grove	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight east and north from Catharine	752	15"	"	1,058.67
	250	12"	Clay	50.82
	275	8"	"	
				1,109.49
Boylston st.....	610	18"	Cem. }	1,638.72
	346	15"	" }	
Brace st., north from Belmont ave .....	137	10"	Clay	....
Bradford st .....	352	15"	Cem. }	1,301.99
	758	12"	" }	
Bridge st., west of Main.....	798	12"	"	718.79
	275	15"	Clay	429.14
Main to Chestnut.....	1,158	2'-0"x3'-0"	Brick	5,414.20
				6,562.13
Broad st.....	970	15"	Cem.	1,240.75
Brookline ave., east from North st.....	328	12"	Clay }	29.57
	171	10"	" }	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Brown st., Yale to Bay.....	483	10"	Cem. }	\$357.65
	21	8"	" }	
Buckingham place, east from Buckingham st.....	235	10"	Clay	168.97
Buckingham st., Bay to Clarendon .....	651	12"	" }	\$597.24
south from Bay.....	35	12"	Cem. }	
State to Bay .....	305	18"	Clay	1,158.40
	345	15"	" }	
	675	12"	" }	
				1,755.64
Burr st., east from Andrew...	570	12"	"	428.83
Butler st., Chestnut to Cass...	1,268	20"	"	2,021.96
easterly from Cass.....	321	20"	"	520.71
				2,542.67
Calhoun st., North Main to North .....	853	12"	"	631.40
east from North.....	300	8"	"	227.19
				858.59
Cambridge st., south from Bay	276	20"	" }	1,100.88
	331	18"	" }	
	266	15"	" }	
	302	12"	" }	
	278	10"	" }	396.35
				1,497.23
Card-factory pond .....	751	12"	Cem.	408.75
in front of new High school	492	24"	Clay	848.26
High school to State st. ...	88	24"	"	192.35
				1,449.36
Carew st. ....	580	18"	Cem.	671.51
east from 18" pipe .....	200	12"	"	153.28
east from Garden brook to Prospect st .....	1,456	4'-3" cir.	Brick }	21,913.22
	1,257	3'-0" cir.	" }	
	791	2'-8" cir.	" }	
east from Armory st. ....	1,101	10"	Clay	767.46
	448	8"	" }	23,505.47
Cass st., south from Linden..	596	15"	" }	892.07
north from Linden .....	224	12"	" }	
Liberty to Franklin.....	500	12"	" }	457.99
	163	10"	" }	
Catharine st., Dartmouth to McKnight.....	833	2'-0" x 3'-0"	Brick	4,428.92
State to McKnight .....	348	15"	Clay	1,248.05
	438	12"	" }	
	333	10"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

OF SEWER.	Length in Feet.	Size.	Material.	Cost.
e to Walnut...	180	3'-10" x 5'-9"	Brick	\$889.35
Pine.....	1,074	3'-8" x 5'-6"	"	6,206.73
	378	12"	Cem.	288.82
				<u>\$7,384.40</u>
. O., Main st. to	433	2'-0" x 3'-0"	Brick	2,001.44
Center st.....	274	12"	Clay	198.76
				<u>2,200.20</u>
brook, east from	66	24"	"	184.73
st from Main...	99	15"	Cem.	147.60
5" pipe.....	546	12"	"	385.49
Maple.....	527	2'-0" x 3'-0"	Brick	2,275.08
	700	1'-8" x 2'-6"	"	
top of Sterns Hill	334	18"	Cem.	102.50
est from Maple st.	769	18"	Clay	1,211.88
Sterns terrace....	105	12"	"	199.95
Pine st.....	500	12"	"	481.38
l river.....	645	18"	"	2,044.52
	866	15"	"	
	339	12"	"	
	335	12"	"	
	810	10"	"	
				<u>7,362.45</u>
ve., Knox to Cen-	279	10"	Cem.	197.64
.....	285	12"	"	44.07
				<u>241.71</u>
O., Oak to Pine..	463	12"	"	454.31
.....	400	10"	Clay	208.13
north from State..	349	15"	"	746.99
	359	12"	"	
east from Fort	238	12"	"	24.49
ave.....	333	10"	"	
north from Liberty	654	12"	"	
Liberty.....	29	12"	"	576.40
				<u>12.94</u>
.....	527	12"	"	589.34
ve.....	300	15"	"	475.20
Mill river to Cen-				410.62
et.....	398	18"	"	1,454.15
	434	15"	"	
	251	12"	"	
	295	10"	"	

leted.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cherryvale ave., east and west from Long Hill st. ....	596	10"	Clay	\$15.74
Chester st., Hancock to Central	330	8"	"	....
Chestnut st., south from Edwards	575	12"	Cem.	\$579.02
south from Mattoon. ....	288	15"	"	319.69
Mattoon to Pearl. ....	313	16" x 24"	Brick	445.40
Pearl to Bridge. ....	143	1'-8" x 2'-6"	"	599.51
Bridge to Worthington. ....	480	2'-0"	"	....
Worthington to Taylor. ....	60	18"	Cem. }	291.17
	244	12"	" }	
Lyman st. to B. & A. R. R. ....	134	18"	" }	355.41
	72	12"	" }	
south from Franklin. ....	500	12"	"	358.75
north from Franklin. ....	397	12"	"	294.14
south from Carew. ....	126	8"	Clay	100.68
Essex to Everett. ....	374	15"	Cem.	586.72
Carew to Prospect. ....	424	24"	Clay }	1,618.64
	537	20"	" }	
north from Prospect. ....	313	18"	Cem.	406.00
Bancroft to Montmorenci. ....	391	15"	"	535.24
south from Bancroft. ....	299	12"	"	213.18
Ringgold to Prospect. ....	220	12"	"	178.88
north from Montmorenci. ....	185	12"	"	252.23
	717	12"	Clay	807.01
north from Eagle st. ....	87	15"	"	....
south from Merwin st. ....	178	10"	"	....
south from Eagle st. ....	171	10"	"	....
south from Douglas st. ....	450	10"	"	385.61
For brick sewer see Bancroft st.				8,327.28
Chestnut st., I. O., Worcester to Hampden. ....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire. ....	307	15"	"	342.65
				738.16
Church st. ....	556	18"	"	1,398.71
	80	15"	Cem.	157.23
				1,555.94
Churchill st., Sumner ave. to Garfield st. ....	580	12"	Clay	84.12
	55	8"	"	6.89
				91.01
Clarendon st., Worthington to St. James ave. ....	336	18"	Cem. }	1,855.39
St. James ave. to Sherman st. ....	885	12"	" }	
west from Worthington. ....	205	10"	Clay	225.80
				2,081.19

## SEWER CONSTRUCTION.—CONTINUED.

OF SEWER.	Length in Feet.	Size.	Material.	Cost.
.....	398	15"	Clay	\$696.54
.....	253	12"	"	
t., east from Ar	274	18"	"	790.48
.....	250	15"	"	
.....	276	12"	"	
.....	284	10"	"	
north from Bay..	250	12"	"	319.95
.....	119	10"	"	
south from Central	406	8"	"	82 10
ave., south from	464	10"	"	\$441.52
ave.....	410	12"	"	
er to Fulton st....	593	7'-3"x4'-10"	Cem. Brick	
Fulton st. from	1,080	7'-0"x4'-8"	"	26,137.87
to Sargeant.....	42	7'-3"x4'-10"	"	
st.....	920	6'-9"x4'-6"	"	
, west from Garden	250	6'-9"x4'-6"	"	
on with Garden	32	5'-0"	"	2,207.90
d outlet .....		24"	Wood	
		24"	C.Ir'n	
.., State st. to Shat				28,787.29
ve .....	839	12"	Clay	139.62
n Shattuck ave.....	175	12"	"	....
State st. to Wilbra	34	12"	"	139.62
ad .....	443	10"	"	349.92
east from Eastern	300	12"	"	457.04
.....	269	10"	"	
ave., south from	326	12"	"	....
.....	348	10"	"	
Wilbraham road to	448	18"	"	1,892.82
st.....	569	15"	"	
.....	658	12"	"	
terrace, north and	498	10"	"	....
on Liberty st.....				
ave., north from				
Park ave.....	307	10"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Commonwealth ave., Belmont ave. to Washington street...	441 500 549	24" 20" 18"	Clay " } " }	\$9,878.00
Congress st.....	266 221 76	15" 12" 10"	Cem. " } " }	\$805.66
east from Garden Brook...	133 198 369 288	20" 18" 15" 12"	Clay " } " }	1,463.00 2,268.66
Continental ave., south from Sumner ave.....	215 202	12" 10"	" } " }	27.45
Cook's ave., Worthington st. to N. Church ave..... south from N. Church ave. (includes cost of N. Church ave.) .....	117 69	15" 10"	Cem. " }	573.84
Cornell st., Dartmouth terrace to Wellesley st.....	185 374	15" 12"	Clay " }	543.05
north from Wellesley street.	186	10"	"	208.20
westerly from Princeton....	52 86	10" 8"	Cem. Clay	47.30 88.04
easterly from Princeton....	181 120	10" 10"	Cem. Clay	100.72 149.53
Court st., east from Water....	273	12"	Cem.	226.15
west from City Hall.....	431	12"	"	553.45
Main st. to City Hall .....	200	12"	"	309.67
Cortland st., north from State.	164 621	15" 12"	Clay " }	1,089.27 672.01
Crosby st., west from Walnut st.	321	10"	"	231.88
Cross st., east from Willow...	363	12"	Cem.	311.56
Main to Willow .....	388	18"	Clay	878.12
Crystal ave., east from Belmont ave.....	251 250 298	15" 12" 10"	" } " }	1,189.68 24.07
Cumberland st., west from Chestnut st.....	167	10"	"	125.29
Cypress st., from Conn. river to Garden brook in Ferry st .....	1,466	3'-4" x 5'-0"	Brick	

## SEWER CONSTRUCTION.—CONTINUED.

E OF SEWER.	Length in Feet.	Size.	Material.	Cost.
.....	360	12"	Clay	\$484.08
north from sewer,				
from Hubbard ave...	203	10"	"	\$157.30
om Winthrop.....	46	8"	"	13.08
				170.38
st., St. James ave.				
e st.....	973	3'-0" x 4'-6"	Brick	8,247.06
owles.....	295	2'-6" x 3'-9"	"	
terrace, Worthing-				
to Cornell.....	499	20"	Clay	2,213.06
	357	18"	"	
	177	15"	"	
	229	15"	"	
south from Bay....				
	380	12"	"	165.40
	518	10"	"	
e., west from White.	350	10"	"	95.87
ve., west from Fisk				
.....	510	12"	"	608.57
Plainfield st.....	403	12"	"	
, Knox to Pine....	558	12"	Cem.	
	226	10"	Clay	60 83
				245.10
				305.93
st., Mill st. to Sum-				
ve.....	35	4'-6" cir.	Brick	44,552.11
	60	5'-0" x 2' 1"	"	
	251	5'-0" cir.	"	
	679	4'-0" cir.	"	
	460	4'-10" x 7' 3"	"	
	869	4'-8" x 7'-0"	"	
	1,040	4'-4" x 6'-6"	"	
	996	4'-2" x 6'-3"	"	
om Sumner ave....	1,379	2'-6" x 3'-9"	"	8,760.53
	324	2'-4" x 3'-6"	"	
	434	2'-0" x 3'-0"	"	
	312	1'-10" x 2'-9"	"	
				53,312 64
t., east from Birnie				
.....	315	10"	Clay	....
r st., St. James ave.				
merst st.....	364	12"	"	359.50
	238	10"	"	
st. extension.				
main to Chestnut....	424	4'-6"	Brick	4,805.19
	442	4'-0"	"	
t. (see Rowland ave.)	....	....	....	....
ve., south from State				
.....	359	12"	Clay	25.14
	331	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dwight st., north from Harrison ave.....	100	15"	Cem.	\$144.41
north from Worthington ..	342	12"	"	374.78
south from Worthington....	269	12"	Clay	
south from Hillman.....	226	10"	"	
north from Hillman .....	103	10"	"	
north from Sanford.....	229	20"	"	2,520.71
		18"	"	
		15"	"	
south from Sanford.....		3'-8"x4'-0"	Brick	1,571.86
Dymon st.....	4	12"	Cem.	\$4.61
Eagle st., North Main to Chest- nut .....	64	15"	Clay	38
East Court st, west from Dwight	26	12"	"	
		10"	"	30
Eastern ave., north from Mon- roe st.....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
south from Monroe st....	28	12"	Cem.	45.09
	210	12"	Clay	147.90
north from Lebanon st....	194	12"	Cem.	331.17
Lebanon to Olive st.....	159	12"	"	190.96
south from Olive st .....	166	8"	Clay	119.57
Greene to Ladd.....	38	15"	"	27.25
south from Greene.....	121	8"	"	69.58
north from King st. ....	151	10"	Cem.	166.50
	101	10"	Clay	149.70
north from Pendleton ave..	312	12"	Cem.	190.38
north from Tyler st....	286	12"	"	181.30
north from Quincy st.....	118	10"	"	131.15
Watershop pond to Man- hattan st.....	1,164	24"	Clay	2,089.43
Manhattan to Alden st. .	338	20"	"	636.21
Alden to Collins st.....	231	12"	"	313.99
East William st.(see William st)	....	12"	Cem.	4.20
Edwards st .....	551	12"	"	4
Elliott st., into and through Salem and 290 feet in Salem .....	283	18"	"	
	709	15"	"	
	533	12"	"	1.4
Elm st., Conn. river to Water st. ....	385	3'-9"x3'-9"	Brick	29.70
Water st. to Main.....	996	3'-8"x5'-6"	"	10,714.49
submerged outlet.....	191	24"	Wood	1,700.79
	26	24"		

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
1st., Main to Hanover	300	18"	Clay	\$707.66
	249	15"	"	
	50	12"	"	
	542	12"	Cem.	
..... west from Garden				579.58
..... k .....	418	15"	"	\$355.00
..... brook to Chestnut..	1,115	2'-2"x3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
				7,815.48
..... I. O., west from Oak	254	12"	Clay	424.89
	145	10"	"	
..... on to Myrtle st. ....	281	10"	"	
				210.09
				634.98
..... t., Chestnut to brook	323	15"	"	308.39
..... om Cass .....	926	15"	"	821.43
..... m Cass .....				104.35
				1,234.17
..... ve., Belmont ave. to				
..... inson st. ....	389	12"	"	1,102.00
	741	10"	"	
..... rom Dickinson st. ....	77	8"	"	
				50.67
				1,152.67
..... s place, north from				
..... ington st. ....	249	10"	"	220.66
..... st., west from Litch-				
..... ..	380	12"	"	.....
..... nd west from Garfield	556	10"	"	351.64
				351.64
..... st., Worthington to				
..... l .....	567	12"	Cem.	740.92
..... rom Summer .....	274	10"	Clay	172.00
				912.92
..... Main to Garden brook				
..... Cypress st.) .....				.....
..... brook to Chestnut st	1,168	2'-4"x3'-6"	Brick	5,377.81
				5,377.81
..... ave., Sumner to				
..... iceland .....	350	10"	Clay	46.01
	270	8"	"	
..... and to Pineywoods ave.	447	10"	"	
		8"	"	.....
				46.01
..... , Rowland to Worces-				
..... ..	272	24"	"	1,073.11
	275	20"	"	
	298	10"	"	
..... from Wason .....	299	24"	"	
	294	20"	"	1,216.81
	248	12"	"	2,289.92



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Florence st., east from Pine...	824	15"	Cem. }	\$2,068.95
east from Hancock .....	651	12"	" }	303.15
	283	10"	" }	<u>2,372.10</u>
Florentine Gardens, north from Pineywoods ave. ....	421	10"	Clay	....
Florida st., Worthington to St. James ave. ....	935	2'-2" x 3'-3"	Brick	4,499.10
St. James ave. to Bay st. ....	599	24"	Clay	1,832.21
Worthington to Ingersoll grove .....	273	15"	"	359.06
	561	12"	"	<u>523.88</u>
				7,214.25
Forest st., Belmont ave. to Forest Park ave. ....	419	12"	" }	651.93
	255	10"	" }	
Forest Park ave., north from Sumner ave. ....	567	12"	"	123.15
south from Sumner ave. ....	500	10"	"	....
east from Fort Pleasant ave. ....	1,081	24"	"	....
extension to Garfield st. ....	325	20"	"	1,217.48
	562	18"	" }	
north from Pineywoods ave. ....	380	10"	" }	<u>33.87</u>
				1,374.50
Fort st., Main to Water .....	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave. ....	888	2'-4" x 3'-6"	Brick }	13,293.38
	1,825	2'-0" x 3'-0"	" }	293.42
south from Mill st. ....	428	12"	Clay	<u>13,586.80</u>
Franklin st., west from Garden brook sewer. ....	434	18"	Cem.	....
east from Garden brook sewer .....	469	18"	" }	1,834.76
	735	15"	" }	
Chestnut to Charles. ....	273	15"	Clay	303.37
east from Charles .....	670	12"	"	471.99
west from Nursery. ....	207	15"	"	....
east from Nursery .....	107	15"	"	199.93
	557	15"	Cem.	....
east from Cass. ....	621	12"	Clay }	684.32
	70	10"	" }	<u>3,494.37</u>
Fremont st., Main to Water. .	780	....	Brick	702.45
west from Main .....	656	12"	Cem.	656.59
	30	12"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fulton st., Cypress to Clinton	882	12"	Cem.	\$826.66
north from Clinton .....	829	15"	"	1,138.56
north from John .....	314	12"	Clay	674.48
	401	10"	"	
				\$2,639.70
Gardner ave., north from Gardner st. ....	151	8"	"	73.11
Gardner st. ....	655	2'-0" x 3'-0"	Brick	1,995.23
	400	12"	Cem.	518.97
				2,514.20
Garden brook sewer, north from Liberty st. to C. R. R. ....	2,936,	5'-6",	cir. Brick	47,577.34
	766	5'-0",	cir. "	
	1,303	4'-6",	cir. "	
	236	3'-0" x 4'-6"	"	
Worthington st., easterly to Armory st. ....	3,274	4 6-10',	cir. "	29,761.32
	952	4'-1",	cir. "	
Garfield st., east from Forest Park ave	556	15"	Clay	77,338.66
	514	12"	"	
west from Belmont ave. ....	531	10"	"	
				329.87
				1,297.03
George st., south from Dexter	409	10"	"	332.45
Girard ave., Bay st. to McKnight. ....	947	12"	"	711.13
Grace st., east from Birnie ave	274	15"	Cem.	51.56
Grand ave., east from Reverest.	250	15"	Clay	.....
	252	12"	"	
west from Revere st. ....	151	10"	"	
Grant st. ....	588	12"	Cem.	439.38
Granville st., Eastern ave. to Logan st. ....	495	12"	"	519.02
Gray's ave. ....	495	12"	"	421.06
Greene st., Hancock to Eastern ave. ....	610	18"	"	1,754.35
	793	15"	"	
Greenleaf st., Sumner ave. to Garfield st. ....	527	12"	Clay	133.60
Greenwood st., Main to Garden brook .....	386	12"	Cem.	2,231.69
east from Garden brook. ....	538	15"	Clay	
east from 15" pipe .....	113	12"	"	
	452	12"	Cem.	
Grosvenor st. ....	181	18"	"	686.55
	648	15"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Grove st., west from North.	679	10"	Clay	\$442.65
Grover st., east from Armory st.	300	18"	"	898.06
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dick- inson st.	500	12"	"	817.91
	474	10"	"	
Hampden st.	569	15"	Cem.	711.90
Hampden st., I. O.	459	12"	"	301.25
Hampshire st., I. O., east from Oak	250	12"	"	\$206.20
west from Oak	300	12"	Clay	633.59
	398	10"	"	
west from Myrtle st.	300	10"	"	196.76
				1,036.55
Hancock ave., west from Han- cock st.	520	10"	"	531.80
Hancock st., Central to Walnut	218	18"	Cem.	1,759.06
	1,343	15"	"	
north from Walnut	122	12"	"	88.00
Walnut (through Lebanon) to Quincy	1,852	3'-6" x 5'-3"	Brick	21,668.02
Quincy to State	913	3'-4" x 5'-0"	"	
Lebanon to Alden	827	2'-0" x 3'-0"	"	5,009.61
Mill river to Central st.	920	12"	Clay	866.30
				29,390.99
Hanover st.	830	2'-2" x 3'-3"	Brick	2,650.26
Harriet st., east from North Main st.	250	15"	Clay	377.17
	207	12"	"	
east from North st.	330	10"	"	172.92
				550.09
Harrison ave., Main st. to Chestnut	600	15"	Cem.	874.11
	250	8"	Clay	203.61
				1,077.72
Harvard st., Yale to St. James ave.	316	18"	"	967.94
	300	15"	"	
	291	12"	Cem.	266.84
St. James ave. to Cornell st.	736	12"	"	25.66
				1,260.44
Hawley st., Wilbraham road to Monroe st.	181	12"	"	40.40
	330	10"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

E OF SEWER.	Length in Feet.	Size.	Material.	Cost.
st., west from Han-				
.....	441	12"	Cem	\$445.87
., north from State	335	12"	Clay	
.....	299	10"	"	
.....	222	8"	"	
., north to Chestnut	663	12"	"	492.56
., Mill river to Alden				
.....	754	20"	"	\$2,388.46
.....	228	18"	"	
.....	184	15"	"	
.....	788	12"	"	
way for overflow				75.00
.....				2,463.46
.....	810	15"	Cem.	1,331.39
.....	844	12"	"	
n Ingraham ave....	846	12"	Clay	945.32
.....				2,276.71
st., south from Allen	625	18"	Clay	1,428.06
.....	304	15"	"	
.....	193	12"	"	
.....	404	10"	"	
t., Main to Dwight..	350	15"	"	1,436.30
.....	380	12"	"	
lace, east from Rich-				
st.....	106	8"	"	....
st.....	734	12"	Cem.	928.06
., south from State...	31	12"	Clay	31.56
.....	370	10"	"	
t., east from North				
.....	444	10"	Cem.	39.04
on to North st.....	255	10"	Clay	....
.....				39.04
st., west from Water	350	12"	Cem.	364.47
on Water.....	312	12"	"	289.14
om Main.....	344	15"	Clay	799.34
.....	321	12"	"	
.....				1,452.95
ave., east from Main				
.....	257	15"	"	630.47
.....	321	12"	"	
rrace, north from				
1 st.....	279	12"	"	....
on st., east from	300	12"	"	416.95
ave.....	300	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Ingersoll grove, north from Worthington st.....	782	12"	Cem.	\$1,003.05
	218	8"	Clay	
east from Bowdoin st	132	10"	"	106.53
Irrington ave., south from Summer ave.....	300	12"	"	.....
	100	10"	"	
Jackson st., south from Sum- ner ave.....	460	10"	"	56.78
	140	8"	"	
north from Pineywoods ave.	281	10"	"	.....
James st.....	289	15"	Cem.	}
	534	12"	"	
Jefferson ave., North Main st. to Chestnut .....	414	12"	"	492.50
	299	20"	Clay	1,663.86
	299	18"	"	
	276	15"	"	
	60	12"	"	
	78	6"	"	37.89
rear of south side.....	518	12"	Cem.	364.84
John st.....	652	12"	"	2,
Johnson st. east from Dickin- son st.....	496	18"	Clay	
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay	}
	551	10"	"	
Kenwood Park, north from Belmont ave .....	130	12"	"	}
	1,127	10"	"	
Kibbe ave., Summer st. to Worthington .....	260	18"	"	}
King st., Walnut to Hancock	504	15"	Cem.	
	441	12"	"	921.37
Hancock to Eastern ave...	710	18"	"	1,808.75
	686	15"	"	
Eastern ave. to Logan st....	405	12"	"	}
	72	10"	Clay	
Knox st., Mill river to Wind- sor st.....	1,115	15"	"	}
	198	12"	"	
Ladd st., Eastern ave. to Logan st .....	243	15"	"	}
	304	12"	"	
Lafayette st., St. James ave. to Amherst st .....	582	12"	"	}
	21	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay	\$2,088.10 282.48
				\$2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	....
Lebanon st. (see Hancock)...	158	3'-6"x5'-3"	Brick	....
west from Hancock .....	606	2'-0"x3'-0"	"	1,495.77
Hancock to Eastern ave ...	816	18" 15"	Cem. " }	1,701.28
				3,197.05
Lenox st. ....	465	10"	Clay	32.91
Lexington ave., Chestnut st. to Massasoit .....	668	12"	"	516.31
Leyfred ter., north from Bel- mont ave. ....	300 317	18" 15"	" " }	957.30
Liberty st., west from Garden brook .....	70 290	... 12"	Brick Cem. }	
Garden brook to Chestnut st. ....	967 171	15" 8"	" " }	1,124.84
Chestnut to Webster .....	784 659 684	2'-4"x3'-6" 1'-10"x2'-9" 2'-2"x3'-3"	Brick " " }	9,123.49
Webster to Armory .....	366 1,282 317 449	3'-0"x4'-6" 2'-2"x3'-3" 1'-10"x2'-9" 2'-2"x3'-3"	" " " " }	5,383.15
north from Armory .....	1,194 616	24" 18"	Clay " }	2,539.81
				3,126.37
Lillian st., east from Oak .....	297	12"	"	21,297.66
Lincoln st., west from Magazine st .....	823	12"	"	232.47
Linden st .....	470 862	18" 15"	" " }	676.54
Litchfield st., north from Garfield Belmont ave. to Fairfield st.	69 159	6" 15"	" " }	1,254.55
				7.10
				335.11
				342.21
Locust st., York to Mill .....	84 364 686	3'-0"x4'-6" 2'-9"x4'-11" 2'-6"x3'-9"	Brick " " }	6,804.18
Logan st., north from Ladd ..	88	10"	Clay	67.64
north from Granville .....	200	10"	"	147.48
				215.12
Lombard st .....	500	12"	Cem.	344.69

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Long Hill st. and Washington ave., extension east from pipe .....	650 823	2'-4" x 3'-6" 2'-2" x 3'-3"	Brick " }	\$6,969.65
Long Hill st., west from Wash- ington ave. ....	399 185 487	15" 12" 10"	Clay " " }	953.28
south from Sumner ave.	356	8"	"	324.90
south from Warner pl. ....	423	10"	"	379.51
east from Conn. river .....	1,310	24"	"	2,086.09
submerged outlet. ....	26 290 28	18" 18" 18"	" Wood C. I.	5,387.70
Loring st. ....	650	12"	Cem.	\$16,101.13 750.93
Lowell st., dike to Plainfield st. ....	305 396 396 283	18" 15" 12" 10"	Clay " " " }	986.21
Lyman st. ....	1,335 720	2'-0" x 3'-0" 15"	Brick Cem.	6,113.12 1,655.26
Lyons st., I. O., south from Main st. ....	261	18"	Clay	7,768.38 352.96
Madison ave., north from Cen- tral st. ....	250 287	12" 10"	" " }	737.57
Magazine st. ....	682 249	18" 15"	" " }	1,103.19
Magnolia terrace, east side, Sumner ave. to Spruceland south from Spruceland....	586 90	8" 8"	" " }	95.64
west side, Sumner ave. to Spruceland .....	622	8"	"	.....
north from Washington ave.	362 602	24" 12"	" " }	.....
overflow connection between east and west side. ....	62	8"	"	26.00
Main st., including cost of parts in Carew and Franklin..	523	12"	Cem.	944.47
south from Sargeant st. ....	341 442 480 186	24" 20" 18" 15"	Clay " " " }	2,539.81
south from Locust .....	800	15"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
York to B. & A. R.R.	56	7'-0", cir.	Brick	\$20,812.99
	1,772	6'-6", cir.	"	
	906	5'-6", cir.	"	
	990	5'-0", cir.	"	
	1,624	3'-4" x 5'-0"	"	34,453.56
	864	2'-4" x 3'-6"	"	
	263	12"	Clay	164.82
				\$60,270.20
I. O. ....	2,321	2'-4" x 3'-6"	Brick	7,636.81
	500	18"	Cem.	837.71
	185	15"	"	
	103	12"	Clay	128.49
to Lyons st. ....	1,110	2'-0" x 3'-0"	Brick	5,024.19
from Lyons st. ....	205	24"	Clay	1,334.58
	245	18"	"	
	129	12"	"	
st., south from Al-				14,961.78
.....	542	15"	"	....
	291	12"	"	
	494	10"	"	
n st., Eastern ave. to				826.79
nut st. ....	290	15"	"	
	645	12"	"	
	205	10"	"	
, Park to High. ....	274	18"	Cem.	294.91
from Union. ....	515	18"	"	959.13
	135	12"	"	
from Pine. ....	195	15"	"	1,421.68
	850	12"	"	
from Temple. ....			"	51.55
from Central. ....	33	18"	"	160.95
	† 338	12"	"	
ll st., north from State	337	15"	Clay	2,888.22
	300	12"	"	
	346	10"	"	70.80
od terrace, east from				....
Pleasant ave. ....	682	15"	"	
	329	12"	"	
	178	10"	"	
st. ....	222	18"	Cem.	1,178.97
	586	15"	"	
	242	12"	"	
ave., east from Bel-				....
t ave. ....	443	15"	Clay	
	612	12"	"	
	778	10"	"	
t st., west from Water	520	12"	Cem.	507.30
om Water. ....	858	12"	"	801.44
				1,308.74

† originally reported under Central st. † Cement pipe previously omitted.



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Marion st., south from Bay...	833	12"	Clay	\$795.45
east from Chapin.....	94	10"	"	25.89
	319	8"	"	4821.34
Market st.....	147	....	Brick	
	633	15"	Cem.	1,066.36
	123	12"	"	
	119	10"	Clay	....
Massachusetts ave., south from Wilbraham road .....	300	15"	"	1,066.36
	300	12"	"	953.68
	227	10"	"	
Massasoit place, east from Massasoit st.....	381	12"	"	
Massasoit st., north from Carew	709	12"	Cem.	547.51
south from Lexington ave.	300	12"	Clay	258.56
	250	10"	"	
south from Montmorenci...	233	10"	"	168.93
north from Montmorenci ...	152	10"	"	92.94
				1,067.94
Mattoon st.....	356	16"x 24"	Brick	
	87	15"	Cem.	688.50
Maynard st., State st. to Shattuck ave. ....	431	15"	Clay	
	400	12"	"	607.82
McKnight st., Catharine to Sherman.....	255	15"	Cem.	421.42
	30	15"	Clay	56.78
Catharine to Bowles.....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles to Girard ave.....	119	12"	Cem.	81.85
	263	10"	Clay	233.51
				936.15
Mechanic st.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
				231.73
Medford st., east from Birnie ave .....	280	12"	"	
	234	10"	"	349.25
Melrose st., Marshall place and Cottage ave.....	263	15"	"	
	74	12"	"	
	772	10"	"	1,345.66
	592	8"	"	
Merrick ave., south from King st	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut .....	774	15"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

E OF SEWER.	Length in Feet.	Size.	Material.	Cost.
intercepting sewer to Locust st. ....	370 691	5'-3" 4'-0"	Brick	\$6,066.64
st. to Hickory.....	587 131 1,748 779 1,611	4' 0", cir. 3' 6"x 5'-3" 5' 9", cir. 4'-3", cir. 3'-3", cir.	"	
and Hickory sts ...	833	2'-2"x 3'-3"	"	9,355.23
Locust to Pine.....	943	2'-6"x 3'-9"	"	4,764.79
on Main.....	236	8"	Cem.	75.45
				4,840.24
st., west from Yale	64	12"	Clay	45.95
	278	10"	"	281.47
st from Berkeley...	350	12"	"	235.62
nd east from Dor-				
rst.....	199	12"	"	218.15
	171	10"	"	121.75
				902.94
t., Hancock to East-				
ve .....	611 789	18" 15"	Cem. }	1,840.52
ave. to Colton st..	316	12"	" }	
ave., north from				
ne st.....	200	8"	Clay	....
enci st., Chestnut to				
asoit .....	676	12"	"	790.32
st., State to Burr....	338	15"	"	75.74
	217	12"	"	
	329	10"	"	
t., west from Garden				
t.....	252	12"	Cem.	199.08
m Garden brook....	568	18"	"	1,092.71
	90	18"	Clay	233.10
				1,524.89
.....	915	2'-0"x 3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
View st., north from				3,301.90
st Park ave. ....	297	12"	Clay	...
	297	10"	"	
st., east from Maple				
.....	687	15"	"	1,246.18
	629	12"	"	
on northerly.....	246	10"	"	
rom Ridgewood ter-				233.59
.....	144	15"	"	....
				1,479.77

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Murray Hill ave .....	.....	.....	Clay	\$96.24
Myrtle st., north from brook..	107	10"	"	69.76
	237	8"	"	
Myrtle st., I. O., Main to Worcester.....	377	24"	"	\$1,003.44
south from Berkshire st.....	180	10"	"	189.63
Nelson ave., north from Greene st .....	90	12"	Cem.	27.96
	188	10"	"	126.54
Nelson st., east from brick sewer.....	308	24"	Clay	154.50
New st .....	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Newman st., west from Knox	175	12"	Cem.	227.20
North st., Morgan to Ringgold	198	18"	"	11.49
Church to Grosvenor.....	68	18"	"	356.84
north from Carew.....	190	8"	"	157.13
north from Bancroft.....	153	12"	"	84.88
south from Bancroft.....	302	18"	Clay	114.54
north from Calhoun .....	256	8"	"	411.55
Osgood to Hebron.....	130	18"	"	48.13
	165	10"	"	426.85
north from Jefferson ave...	233	8"	"	
Waverly to Grove st.....	362	12"	"	177.12
south from Harriet .....	86	8"	"	302.86
Northampton ave., south from Wilbraham road.....	1,101	12"	"	....
North Church ave., east from Cook's ave.....	209	10"	Cem.	2,079.30
west from Cook's ave. (for cost see Cook's ave.)...	133	10"	"	880.79
North Main st., Arch to Osgood .....	730	15"	"	....
Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	713.66
Jefferson ave. to Waverly st.	359	24"	Clay	974.27
	420	20"	"	2,568.01
	285	15"	"	
	170	12"	"	226.45
north from Wason ave....	348	12"	"	281.41
north from Morgan.....	173	8"	"	90.69
south from Morgan.....	102	8"	"	41.98
south from Wason ave....	215	2'-0"x3'-0"	Brick	860.00
south from Douglas.....	500	1'-8"x2'-6"	"	1,874.35
north from Douglas.....	326	2'-4"x3'-6"	"	1,840.34
	272	1'-10"x2'-9"	"	
north from Eagle .....	142	24"	Clay	449.66
Harriet to Waverly .....	250	24"	"	470.75
				10,391.1

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
st., Main to Hanover	1,051	12"	Cem.	\$1,069.55
st., Liberty to Franklin	694	2'-8", cir.	Brick	\$2,284.52
rom Franklin.....	587	2'-8", cir.	"	.....
				2,284.52
north from Union (for see State).....	717	18"	Cem.	.....
to Tyler.....	220	18"	Clay	} 752.00
	268	15"	"	
from Walnut.....	158	18"	Cem.	280.65
				1,032.65
L. O., north from Main	179	15"	"	} 637.00
	171	12"	"	
from Main st.....	590	2'-2" x 3'-3"	Brick	2,345.84
sewer to Hampshire st..	797	24"	Clay	1,652.79
from Hampshire.....	285	18"	"	} 1,509.70
	300	15"	"	
	400	12"	"	6,145.33
ove ave., north from				
e st.....	349	18"	"	} .....
	327	15"	"	
	158	12"	"	
ion northerly.....	256	12"	"	.....
st., Dickinson st. to				
nont ave.....	895	24"	"	2,218.71
rly from Orange st....	218	8"	"	110.79
				2,329.50
, Eastern ave. to Logan	540	10"	"	400.76
t., west from White st	381	12"	"	} 961.35
	649	10"	"	
om White st.....	699	10"	"	
om Highland st....	588	8"	"	} 1,015.67
st., west from Plain-				
st.....	325	20"	"	
	301	15"	"	
	297	12"	"	} .....
	140	10"	"	
court, west from Or-				
s st.....	205	8"	"	.....
st., north from Union	39	12"	Cem.	36.23
	310	12"	Clay	} 456.19
	380	10"	"	
from Tyler.....	188	10"	Cem.	187.74
from Pendleton ave.	281	12"	"	327.73
				1,007.89
st., Garden brook to				
th st.....	92	18"	Clay	174.87
	588	18"	Cem.	} 1,544.57
rom Garden brook....	257	12"	"	
				1,719.44

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oxford st., north from Cres- cent terrace.....	63	12"	Clay	.....
Ozark st., south from Grand ave.	456	10"	"	\$23.58
Palmer ave., east from Locust st.	14	12"	Cem.	.....
	351	18"	Clay	\$1,165.79
	337	15"	"	
Park st.....	1,140	18"	Cem.	1,165.79
Parker st., I. O., from Loon pond to B. & A. R. R....	1,227	12"	Clay	1,393.35
south from Main st .....	1,098	24"	"	1,266.36
south from Chicopee river..	32	24"	"	2,460.31
	221	12"	"	261.81
Parkwood st.....	419	10"	"	3,988.48
Pasadena ave., south from White st.....	156	12"	"	70.08
	291	10"	"	258.61
Pasco st., I. O., south from Essex extension southerly.....	622	10"	"	
	102	10"	"	537.36
				47.49
				584.85
Patton st., east from Garden brook.....	352	18"	"	1,572.67
	349	15"	"	
	537	12"	"	
west from Garden brook....	214	10"	"	173.78
Peabody lane.....	212	12"	Cem.	1,746.48
Pearl st .....	190	...	Brick	162.76
Chestnut to Spring.....	514	24"	Clay	1,792.62
	447	20"	"	
				1,898.78
Pendleton ave., Walnut st. to Hancock.....	287	18"	Cem.	1,603.16
	524	15"	"	
	429	12"	"	
Hancock st. to Eastern ave.	600	18"	"	1,395.98
	793	15"	"	
				2,999.16
Phoenix ave.....	236	18"	Clay	840.25
	250	15"	"	
	89	10"	"	
Pine st., Mill to Cedar.....	740	2'-6"x3'-9"	Brick	13,659.54
	1,529	3'-6"x5'-3"	"	
	500	3'-10"x5'-9"	"	
Cedar to Walnut.....	62	18"	Cem.	1,665.54
	884	15"	"	
	631	12"	"	
Pine st., I. O.....	1,896	24"	"	15,325.08
				4,170.

## SEWER CONSTRUCTION.—CONTINUED.

E OF SEWER.	Length in Feet.	Size.	Material.	Cost.
rt, east from Pine st.	348	10"	Cem.	\$266.89
ls ave., east from olia terrace.....	348	20"	Clay	....
	404	12"	"	
om Magnolia terrace st from Washington	350	10"	"	
.....	334	15"	"	....
	263	12"	"	
n Jackson st. ....	341	12"	"	
st., Wason ave. to nd.....	304	24"	"	\$1,253.59
	249	20"	"	
	53	18"	"	
d ave. to Talcott ...	274	24"	"	1,208.95
	299	20"	"	
t st. to Fulton st....	414	18"	"	2,525.13
	537	15"	"	
	456	12"	"	
	244	10"	"	
om Talcott ave .....	216	10"	"	158.46
urn to Orchard ....	331	2'- 8"x4'-0"	Brick	1,555.00
om Washburn .....	122	12"	Clay	129.78
l to Newland.....	303	2'-6"x3'-9"	Brick	2,367.93
id to Roseland ....	287	2'-4"x3'-6"	"	4,477.61
	294	2'-2"x3'-3"	"	
				13,676.45
st.....	296	12"	Cem.	249.74
st., Plainfield to Ful-				196.59
.....	375	10"	Clay	332.00
st., east from Birnie	251	12"	"	
.....	224	10"	"	
uce, north from State				....
.....	396	15"	"	
	301	12"	"	
	274	10"	"	
, King to Lebanon .	329	12"	Cem.	333.16
st., Yale to Vas-				....
.....	665	12"	"	
ies ave. to Cornell st.	298	12"	"	
Amherst.....	103	18"	"	
	689	18"	Clay	724.15
	151	15"	"	177.72
st., east from Chest-				1,386.47
.....	218	18"	"	623.53
	199	15"	"	
	196	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Pyncheon st.....	950	2'-0" x 3'-0"	Brick	\$3,108.00
Queen st., Walnut to Hancock	634	12"	Cem.	594.68
Quincy st., Oak to Stebbins...	860	12"	"	\$577.06
Hancock to Stebbins .....	522	12"	"	549.58
Hancock to Eastern ave....	637	18"	"	1,598.58
	765	15"	"	
Colton to Eastern ave.....	208	10"	Clay	156.87
				2,882.09
Randolph st., east from Maple- wood terrace .....	250	12"	"	....
	251	10"	"	
Reed st., south from State....	219	12"	"	28.74
	309	10"	"	
Revere st., south from White	750	20"	"	23.33
	250	10"	"	
	209	8"	"	
Richelieu place, east from Richelieu st.....	100	8"	"	....
Richelieu st., north from Cooley lot .....	301	10"	"	....
Ridgewood place, north from Mulberry st .....	400	12"	"	29.46
Ringgold st .....	117	18"	Cem.	681.73
	632	12"	"	
Ripley ave., south from St. James .....	230	10"	"	168.48
Riverview st., north from River view terrace.....	63	10"	Clay	....
Riverview terrace, easterly from Fort Pleasant ave...	298	15"	Clay	....
	322	12"	"	
	105	10"	"	
* Roseland st., west from Plainfield st.....	350	18"	"	940.36
	150	15"	"	
Rowland ave., Conn. river to North Main st., including 630' in Douglas st.....	579	5'-3", cir.	Brick	31,167.24
	51	1'-8" x 2'-6"	"	
	1,247	6'-6", cir.	"	
	1,330	6'-0", cir.	"	
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge ave., east from Main st	574	24"	"	48.42
Salem st. (see Elliott).....	.....	.....	.....	....
Sanford st .....	536	3'-2" x 4'-9"	Brick	4,014.60
School st., Union to Mulberry	549	15"	Clay	630.95
north from Union.....	262	10"	"	204.00
				83

\* Not completed.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
st. ....	830	12"	Cem.	\$661.08
n ave., south from apden st. ....	111	12"	"	147.14
st from Main st., south Hubbard ave. ....	655	12"	"	441.92
st., west from North n st. ....	42	10"	Clay	43.87
st., Main to Garden brook ....	360	15"	"	\$762.77
om Garden brook ....	601	18"	"	1,211.18
om 18" pipe. ....	463	12"	"	
				1,973.95
ave., Maynard to lard ....	200	10"	"	....
	143	8"	"	
ion easterly ....	50	8"	"	....
st., Bay to Clarendon	175	12"	Cem.	571.12
McKnight. ....	443	12"	"	
ight to State ....	301	18"	Clay	1,314.14
	301	15"	"	
	544	12"	"	1,885.26
, east from Armory st.	302	15"	"	449.59
	297	12"	"	
, Knox to Dorne....	200	12"	Cem.	27.26
ave., north from Sum- ave. ....	82	6"	Clay	7.49
t., south from Lyman	281	15"	Cem.	
	130	12"	"	2,460.42
ington to State. ....	470	18"	"	
	640	15"	"	87.28
	644	12"	"	
ion to Worthington st r brick sewer sec rthington st.)	132	12"	Clay	
ington to Summer... ing Summer st., north n Spring. ....	183	5' 0"	Brick	11,023.12
	89	6' 0"x4'-3"	"	
	984	4' 2"x6'-3"	"	13,570.82
e Summer st.)				
ld st. and Glenwood.	677	3' 6", cir.	Brick	14,614.89
	598	3' 3", cir.	"	
	389	4' 3", cir.	"	3,889.98
	1,292	3' 0", cir.	"	
	40	2' 0", cir.	"	18,504.87
	16	2'-10"x 4'-3"	"	
	1,294	24"	Clay	558.03
t. ....	600	12"	Cem.	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Spruceland ave., Magnolia terrace to Beechwood ave.	67	8"	Clay	.....
east from Beechwood ave...	242	8"	"	\$136.48
west from Beechwood ave...	648	8"	"	.....
extension to Long Hill st...	93	8"	"	153.52
				\$290.00
Stafford st., west from Armory st.	402	10"	"	210.53
State st., west from Water....	152	12"	Cem.	.....
	91	12"	"	71.19
west from Main (including cost of 275' in Water)....	907	18"	"	1,676.39
	636	18"	"	1,433.50
Main to Dwight.....	3,855	2'-cir.	Brick	5,770.83
	505	18"	Cem.	
Dwight st., easterly.....	29	2'-8"x4'-0"	Brick	
	265	2'-2"x3'-3"	"	4,897.66
	417	2'-0"x3'-0"	"	
west from Oak st.....	130	12"	Clay	212.78
east from Oak (including cost of Oak north from Union).....	2,110	18"	Cem.	3,470.51
Hancock to Sherman.....	1,147	3'-4"x5'-0"	Brick	
Sherman to Chapin.....	492	3'-0"x4'-6"	"	13,555.85
Chapin st. to Andrew.....	726	3'-0"x4'-6"	"	
Andrew st. to Oak Grove ave.....	937	2'-10"x4'-3"	"	10,793.96
east from Oak Grove ave.....	548	2'-4"x3'-6"	"	
	283	2'-2"x3'-3"	"	5,042.79
	352	2'-0"x3'-0"	"	
Cortland st. to almshouse...	355	24"	Clay	
	112	18"	"	1,897.59
	1,547	12'	"	
Stearns ave., north from Bridge st.....	172	12"	"	48,823.03
Stebbins st.....	506	12"	Cem.	205.83
Sterns terrace, north from Central st.....	393	12"	Clay	467.11
St. James ave., north from Bay st.....	658	12"	Cem.	605.10
Florida st. to Ripley ave...	469	12"	"	521.28
north from Florida st.....	417	18"	"	500.89
	300	12"	"	1,073.90
St. James ave., Clarendon st. to Westminster.....	248	15"	"	404.60
Dartmouth st. to Harvard ..	385	2'-3"x3'-0"	Brick	2,788.53
Harvard to Princeton.....	528	24"	Cl.	

## SEWER CONSTRUCTION.—CONTINUED.

END OF SEWER.	Length in Feet.	Size.	Material.	Cost.
ave., north from				
.....	308	18"	Clay	\$965.55
.....	249	15"	"	
.....	57	12"	"	
n to Dartmouth ...	138	8"	"	64.82
				<hr/> \$7,857.01
e st. ....	777	18"	Cem.	1,084.57
, east from Armory	395	12"	Clay	.....
., north from old				
.....	1,025	3'-8"x5'-6"	Brick	14,524.00
.....	1,091	2'-10"x4'-3"	"	
ing st.)				
ve., Fort Pleasant				
o Randolph st....	673	2'-0"x3'-0"	"	7,968.46
h st. to Jackson....	360	1'-10"x2'-9"	"	
st. to Hamilton....	360	1'-8"x2'-6"	"	
st. to Greenleaf...	367	1'-6"x2'-3"	"	
f st. to Belmont ave	355	20"	Clay	2,906.29
	851	18"	"	
	786	15"	"	
	272	12"	"	
	426	10"	"	
Belmont ave. ....	100	8"	"	37.49
n st. to White....	2,219	2'-8"x4'-0"	Brick	11,531.37
east of White st.	565	2'-2"x3'-3"	"	2,391.46
asant ave. to Long				
.....	448	12"	Clay	815.24
.....	358	10"	"	
				<hr/> 25,650.31
ve., Worthington st.				
lge (includes cost of				
place).....	300	15"	Cem.	696.89
ve., Fisk ave. to				
eld st. ....	362	15"	Clay	549.57
	316	12"	"	
, Main to Chestnut	650	15"	"	1,347.50
	341	12"	"	
	248	12"	"	
				<hr/> 1,603.23
., outlet into High				
sewer.....	169	15"	"	171.71
east from Garden				
.....	300	18"	"	1,256.39
	302	15"	"	
	421	12"	"	
	4	8"	"	
t. ....	48	10"	Cem.	34.02
	874	12"	Clay	565.26
	313	10"	"	<hr/> 599.28

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Thomas st., east from Birnie ave	451	10"	Clay	\$338.41
Thompson st., south from Worthington .....	603	12"	Cem.	\$638.27
St. James ave. to Bay .....	703	15"	"	749.22
State to Bay .....	852	12"	"	653.12
				2,040.61
Tracy ave., south from Franklin .....	14	10"	Clay	15.48
	262	10"	"	15.48
Tyler st., Oak to Hancock ....	717	15"	"	1,089.25
	663	12"	"	
Hancock to Eastern ave...	601	18"	"	778.27
	795	15"	"	644.31
east from Eastern ave.....	251	10"	"	139.49
				2,651.32
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st. ....	2,024	3'-4" x 5'-0"	Brick	27,384.14
	302	2'-6" x 3'-6"	"	
	2,688	2'-0" x 3'-0"	"	
	848	1'-8" x 2'-6"	"	
Oak to Orleans .....	404	15"	Cem.	467.96
Stebbins to Orleans . . . .	428	20"	Clay	737.72
Hancock to Stebbins .....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	"	
Hancock to Eastern ave...	600	18"	"	1,413.45
	800	15"	"	
east from Eastern ave.....	248	10"	Clay	152.56
				34,486.84
Vassar st., north from Harvard (flush gate) .....	550	12"	Cem.	89.81
Ventura st., north from Sumner ave. ....	351	10"	Clay	289.51
Vernon st., east from Water	639	15"	Cem.	795.08
west from Main .....	216	12"	"	310.68
				1,105.76
Vine st. ....	697	12"	"	603.46
Vinton st., Liberty to Franklin	357	12"	Clay	357.63
	262	10"	"	252.13
				609.76
Walnut st., south from State	69	....	Brick	85.23
north from Charter ave ...	292	10"	Clay	418.30
Union to Charter ave. ....	279	12"	Cem.	482.50
Union to Oak .....	17	12"	"	20.50
	558	24"	Clay	792.64
Cedar to Oak .....	1,142	2'-0" x 3'-0"	Brick	4,958.57
	272	18"	Cem.	410.04
from Cedar to below Han- cock .....	784	15"	"	1,073.38
	100	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Walnut st., north from Florence</b> .....	53	8"	Cem.	\$27.12
<b>Hickory to Florence</b> .....	1,026	12"	Clay	992.67
<b>north from Manhattan</b> .....	249	10"	"	212.35
				<hr/> \$9,471.30
<b>Walter st., east from Birnie ave.</b> .....	285	12"	Cem.	14.86
<b>Waltham ave., south from Wilbraham road</b> .....	546	12"	Clay	598.61
<b>Wareham st., south from Grand ave.</b> .....	419	10"	"	21.24
<b>Warner place, west from Fort Pleasant ave.</b> .....	508	12"	"	
	198	10"	"	
<b>extension to Long Hill st.</b> ..	89	10"	"	51.88
				<hr/> 51.88
<b>Warriner ave., east from Locust st.</b> .....	448	12"	"	399.54
<b>Washburn st., Conn. river to B. &amp; M. R. R.</b> .....	1,758	7'-0", cir.	Brick	21,678.46
<b>Washington ave. (see Long Hill st.)</b> .....				
<b>Wason ave., Conn. river to Plainfield st.</b> .....	451	3'-10"x5'-9"	"	
<b>Plainfield st. to Fisk ave.</b> ..	1,051	3'-4"x5'-0"	"	
<b>Fisk to Birnie</b> .....	634	3'-2"x4'-9"	"	
<b>Birnie to North Main st</b> ..	247	2'-0"x3'-0"	"	
<b>Water st., Gardner to Loring north from Loring</b> .....	474	1'-10"x2'-9"	"	1,182.58
	345	12"	Cem.	237.38
<b>Margaret to near State</b> .....	721	2'-0"x3'-0"	Brick	
	868	18"	Cem.	2,284.34
<b>south from Elm</b> .....	275	18"	"	
<b>Elm to Pyncheon</b> .....	43	2'-0"x3'-0"	Brick	198.00
	353	2'-6"x3'-6"	"	2,949.29
<b>north from Pyncheon</b> .....	584	18"	Cem.	
<b>north from Worthington</b> ..	648	15"	"	1,854.84
	61	12"	"	
<b>south from Worthington</b> ..	225	12"	"	233.50
				<hr/> 8,939.93
<b>Water st. extension</b> .....	....	18"	Clay	8.47
<b>Waverly st., from North Main to Chestnut</b> .....	473	20"	"	
	487	10"	"	1,197.09
<b>Webster st., Liberty to Franklin</b> .....	601	12"	"	395.54
<b>Welcome place, north from Bay st</b> .....	238	8"	"	....
<b>Wellesley st., east from Cornell st. (flush gate and well holes)</b> .....	373	12"	Cem.	64.68

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellington ave., south from Wilbraham road.....	287 244 291	15" 12" 10"	Clay } " } " }	  ....
Wendell ave., east from Main st. Westford ave., south from Wilbraham road.....	458 300 300 350	15" 15" 12" 10"	" } " } " } " }	  .... \$676.23
Westminster st., Bay to State. south from St. James ave..	300 300 201 773	15" 12" 10" 12"	" } " } " } " }	 \$705.11 700.02
White st., Allen to Orange... south from Orange..... extension to Dawson ave ..	747 674 274 388 292	24" 20" 18" 15" 15"	" } " } " } " } "	 1,717.86 1,490.97 389.27 275.73
Whitney ave..... Wilbraham ave., south from Wilbraham road..... Alden st. to Beverly.....	450 1,125 999 1,180	12" 12" 10" 8"	Cem. Clay " } " }	 874.50 1,121.36 1,995.86
Wilbraham road, east from State st.....	248	12"	Cem.	157.79
State to Northampton..... east from Northampton ave.	1,451 472 476 478 473 254 256	2'-0"x3'-0" 2'-6"x3'-9" 2'-4"x3'-6" 2'-2"x3'-3" 2'-0"x3'-0" 1'-10"x2'-9" 1'-8"x2'-6"	Brick " } " } " } " } " } " }	 6,198.76 8,970.16
east from brick sewer..... Wilcox st., east from Water	263 405 548 327	20" 12" 15" 12"	Clay } " } Cem. } " }	 859.35 16,186.60
west from Water..... Willard ave., south from Shat- tuck .....	463 215 282 300 241	12" 8" 18" 15" 12"	" } " } Clay } " } " }	 205.76 1,007.65 785.26 785.26

## SEWER CONSTRUCTION.—CONCLUDED.

OF SEWER.	Length in Feet.	Size.	Material.	Cost.
.....	1,576	12"	Cem.	\$1,435.86
Water.....	76	15"	"	459.79
	425	12"	"	
				\$1,895.65
Cross to State ..	413	12"	Clay	791.42
ark.....	265	12"	"	378.17
Park ..	216	18"	Cem.	325.32
Union.....	220	15"	"	302.23
				1,797.14
, east from Dick-				
.....	349	18"	Clay	610.02
st.....	424	12"	"	357.96
west from Knox.	80	15"	Cem.	....
	485	10"	"	
.....	52	18"	"	220.81
	141	15"	"	
	520	....	Stone	
, west from Arm-				
.....	220	10"	Clay	....
ve., north from				
t ave.	451	10"	"	321.97
ve., Plainfield to				
ve.....	1,486	15"	Cem.	53.14
.., I. O., east from				
.....	275	12"	Clay	519.07
	212	10"	"	
Pine ..	546	20"	"	768.42
Myrtle.....	4	24"	"	945.80
	290	20"	"	
	382	2'-0" x 3'-0"	Brick	1,283.00
st., submerged				3,516.29
.....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
er to Main st....	1,038	5'-7" x 7'-0"	Brick	33,410.12
wight .....	821	5'-4" x 7'-0"	"	
Garden brook ..	566	4'-0" x 6'-0"	"	
ght st. to east of				
st.....	530	5'-0" x 5'-3"	"	3,015.70
to Spring st ....	738	4'-3"	"	4,361.35
Spring st., north				
orthington.....	35	5'-0"	"	
south from Worth-				
.....	47	2'-0" x 3'-0"	"	

private party, previously omitted.

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington st., east from main sewer .....	804	18"	Cem. }	\$1,508.23
	242	15"	" }	
	251	12"	" }	
near Autumn st. ....	113	12"	"	118.78
near Sacketts ave. ....		10"	"	111.47
east from West brook. ....		15"	Clay }	1,110.54
		12"	" }	
east from Autumn st. and west from Sacketts ave. ....	2	15"	" }	934.84
		12"	" }	
Sacketts ave. to Federal st. ....	1,131	12"	"	1,113.49
head of Magazine. ....	15	18"	"	375.10
near Magazine to St. James ave. ....	24	3" x 4'-0"	Brick }	16,402.75
	35	" x 3'-1½"	" }	
	1,614	" x 5'-0"	" }	
Yale st., Dartmouth to Prince- ton. ....	350	24"	Clay }	1,770.13
	359	18"	" }	
	233	15"	" }	
north from Princeton. ....	712	12"	"	452.46
York st. ....	1,208	8", cir.	Brick	2,222. 13,912.
Total .....	531.41			\$1,254,358.1

### RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Elliptical shaped.....	635	7'- 3"x4'-10"	Brick and cem. mortar.
" " " " " " " " " " " "	1,080	7'- 0"x4'- 8"	" " " "
" " " " " " " " " " " "	1,170	6'- 9"x4'- 6"	" " " "
" " " " " " " " " " " "	1,038	5'- 7"x7'- 0"	" " " "
" " " " " " " " " " " "	821	5'- 4"x7'- 0"	" " " "
" " " " " " " " " " " "	460	4'-10"x7'- 3"	" " " "
" " " " " " " " " " " "	869	4'- 8"x7'- 0"	" " " "
" " " " " " " " " " " "	1,040	4' 4"x6'- 6"	" " " "
" " " " " " " " " " " "	1,980	4' 2"x6'- 3"	" " " "
" " " " " " " " " " " "	750	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	131	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	830	3'- 4"x5'- 0"	" " " "
" " " " " " " " " " " "	819	3' 0"x4'- 6"	" " " "
" " " " " " " " " " " "	16	2' 10"x4'- 3"	" " " "
" " " " " " " " " " " "	2,248	2'- 8"x4'- 0"	" " " "
" " " " " " " " " " " "	1,283	2' 2"x3'- 3"	" " " "
" " " " " " " " " " " "	417	2'- 0"x3'- 0"	" " " "
Egg shaped.....	566	4'- 0"x6'- 0"	" " " "
" " " " " " " " " " " "	1,131	3'-10"x5'- 9"	" " " "
" " " " " " " " " " " "	2,345	3'- 8"x5'- 6"	" " " "
" " " " " " " " " " " "	3,381	3'- 6"x5'- 3"	" " " "
" " " " " " " " " " " "	11,200	3'- 4"x5'- 0"	" " " "
" " " " " " " " " " " "	1,592	3'- 2"x4'- 9"	" " " "
" " " " " " " " " " " "	2,877	3'- 0"x4'- 6"	" " " "
" " " " " " " " " " " "	2,028	2'-10"x4'- 3"	" " " "
" " " " " " " " " " " "	364	2'- 9"x4'- 11"	" " " "
" " " " " " " " " " " "	2,780	2'- 8"x4'- 0"	" " " "
" " " " " " " " " " " "	4,818	2'- 6"x3'- 9"	" " " "
" " " " " " " " " " " "	655	2'- 6"x3'- 6"	" " " "
" " " " " " " " " " " "	150	2'- 5"x3'- 7 1/2"	" " " "
" " " " " " " " " " " "	8,630	2'- 4"x3'- 6"	" " " "
" " " " " " " " " " " "	8,688	2'- 2"x3'- 3"	" " " "
" " " " " " " " " " " "	603	2'- 1"x3'- 1 1/2"	" " " "
" " " " " " " " " " " "	21,241	2'- 0"x3'- 0"	" " " "
" " " " " " " " " " " "	3,777	1'-10"x2'- 9"	" " " "
" " " " " " " " " " " "	2,382	1'- 8"x2'- 6"	" " " "
" " " " " " " " " " " "	437	1'- 6"x2'- 3"	" " " "
Box with semi-circular top..	530	5'- 0"x5'- 3"	Plank, stone, brick, and cement mortar.
Segmental .....	89	6'- 0"x4'- 3"	Brick and cement mortar.
" " " " " " " " " " " "	60	5'- 0"x2'- 1"	Concrete.
Miscellaneous shapes.....	10,824	4'-0" and under	Stone, brick, and mortar.
Circular.....	3,017	7'-0"	Brick and cement mortar.
" " " " " " " " " " " "	3,019	6'-6"	" " " "
" " " " " " " " " " " "	1,330	6'-0"	" " " "
" " " " " " " " " " " "	1,743	5'-9"	" " " "
" " " " " " " " " " " "	3,842	5'-6"	" " " "
" " " " " " " " " " " "	948	5'-3"	" " " "
" " " " " " " " " " " "	2,257	5'-0"	" " " "



Annual Report  
**\*Superintendent of  
Streets and Sewers**

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**Springfield, Massachusetts**



**For the Year 1904**

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THIRTY-SIXTH ANNUAL REPORT  
OF THE  
**STREET DEPARTMENT.**

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SPRINGFIELD, MASS., December 24, 1904.

*To the City Council:—*

In accordance with the requirements of Chapter 18, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department, and descriptions of work done during the fiscal year ending December 10, 1904.

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**FINANCES IN GENERAL.**

**RECEIPTS.**

Highways and Bridges, . . . .	\$281,655 94	
Walks and Curbing, . . . .	32,048 51	
Watering Streets, . . . .	28,319 40	
	<hr/>	\$292,023 85

**EXPENDITURES.**

Highways and Bridges, . . . .	\$229,937 73	
Walks and Curbing, . . . .	31,991 16	
Watering Streets, . . . .	28,220 55	
	<hr/>	\$290,149 44

**UNEXPENDED BALANCES.**

Highways and Bridges, . . . .	\$1,718 21	
Walks and Curbing, . . . .	57 35	
Watering Streets, . . . .	98 85	
	<hr/>	\$1,874 41

**WORK IN GENERAL.**

Streets, . . .	{	Graveling, . . . . .	2,
		Macadamizing, . . . . .	10,
		Macadam and gravel resurfacing, . . . . .	11,
		Brick paving, . . . . .	
		Granite block paving, . . . . .	2,
		Wood block paving, . . . . .	2,
Street cleaning, . . .	{	Bitulithic paving, . . . . .	48.3
		Gravel, . . . . .	51.3
		Macadam, . . . . .	7.3
		Paving, . . . . .	1,
Sidewalks, . . .	{	Brick (new), . . . . .	8,
		Brick (relaid), . . . . .	1,
		Tar concrete (new), . . . . .	
		Tar concrete (resurfaced), . . . . .	2,
		Cement concrete (new), . . . . .	14,
Curbing, . . .	{	Cinder, . . . . .	16,
		Set, . . . . .	
Crosswalks—new, . . .	{	Reset, . . . . .	79.1
		Streets watered, . . . . .	

**FINANCES ITEMIZED.****HIGHWAYS AND BRIDGES.****RECEIPTS.**

By regular appropriation, . . . . .	\$155,000 00
From Springfield Street Railway Company,	
Corporation tax, . . . . .	21,654 51
Excise tax, . . . . .	10,961 60
From South End bridge—Separation of	
Grades, . . . . .	735 20
From departments and private parties, bills	
rendered, . . . . .	16,804 63
By transfer from Contingencies, . . . . .	20,000 00
By transfer from Walks and Curbing, . . . . .	6

# Report on Streets.

5

## EXPENDITURES.

mobile, repairs and supplies, . . . . .	\$1,686 66	
es, repairs and care, . . . . .	11,060 90	
ard, Logan street, . . . . .	57 18	
ard, Lyman street, . . . . .	2,211 97	
teering, . . . . .	449 80	
and material, billed to departments, . . . . .	6,259 87	
and material, billed to private parties, . . . . .	9,779 97	
damages, account street relocations, . . . . .	2,518 00	
ials on hand, . . . . .	583 61	
and general expenses, . . . . .	2,254 70	
y of superintendent, . . . . .	2,300 04	
y of second assistant superintendent—part, . . . . .	696 21	
roller house repairs and roller equipment, . . . . .	223 84	
t construction, {	Graveling, . . . . .	4,330 96
	Macadamizing, . . . . .	17,302 74
	Paving, . . . . .	62,739 57
t maintenance, {	Cleaning, . . . . .	30,362 90
	Cleaning equipment, . . . . .	853 59
	Macadam and gravel	
	resurfacing, . . . . .	8,902 92
	Repairs, incidental, . . . . .	27,198 93
	Winter expenses, . . . . .	37,530 27
and supplies, . . . . .	1,979 36	
	<u>\$231,283 99</u>	
Credit by		
City teams, . . . . .	\$324 22	
Steam rollers, . . . . .	1,022 04	
	<u>1,346 26</u>	
	<u>\$229,937 73</u>	
Unexpended balance, . . . . .	1,718 21	
	<u>\$231,655 94</u>	

## BILLS COMMITTED TO COLLECTOR OF TAXES.

unpaid Dec. 10, 1903, . . . . .	\$18,479 85	
committed during the		
year 1904, . . . . .	16,120 34	
	<u>\$34,600 19</u>	

*Report on Streets.*

Bills paid during the year 1904, \$17,053 90

Abatements and corrections, . . . 109 42

\$17,163 32

Bills unpaid December 10, 1904,

\$17,411 10

\* Includes \$15,869.03 charged Springfield Street Railway Company  
removal of snow, 1898 to 1902 inclusive.

**WALKS AND CURBING.****RECEIPTS.**

By regular appropriation, . . . . \$14,000 00

From abutters for walks laid previous to 1904, 11,405 15

From abutters for walks laid during 1904, 6,643 36

\$32,048 51**EXPENDITURES.**

Office and general expenses, . . . . \$236 10

Salary of second assistant superintendent—part, 403 90

Engineering, . . . . 176 81

Setting and resetting curbing, . . . . 6,115 54

Work and material not chargeable, . . . . 1,981 03

Rebuilding defective walks, Main street, due  
to Town Brook, . . . . 1,038 36

Crosswalks, new and relaid, . . . . 3,030 01

Tools, . . . . 25 79

Work and material billed to abutters, . . 10,919 70

Work and material billed to departments, . 971 27

\$24,898 51

Transferred to Watering Streets, . . . 1,250 00

Transferred to Highways and Bridges, . . 6,500 00

\$32,648 51

Credit by

City teams, . . \$81 22

Material from  
inventory, 576 13657 35\$31,991 16

Unexpended balance, . . . .

\$57 35

BILLS COMMITTED TO COLLECTOR OF TAXES.

Bills unpaid, December 10, 1903, . . .	\$12,136 23	
Bills committed during the year 1904, . . .	14,368 57	\$26,504 80
	<hr/>	
Bills collected during the year 1904, . . .	\$18,048 51	
Abatements and corrections, . . .	362 41	18,410 92
	<hr/>	
		<hr/>
Bills unpaid, December 10, 1904, . . .		\$8,093 88

WATERING STREETS.

RECEIPTS.

By appropriation, . . . . .	\$8,000 00	
By street watering assessments levied, . . .	16,953 62	
From Springfield Street Railway Company, by agreement, . . . . .	2,114 18	
By bills rendered, . . . . .	1 60	
By transfer from Walks and Curbing, . . .	1,250 00	\$28,319 40
	<hr/>	

EXPENDITURES.

General expense, . . . . .	\$261 05	
Standpipes and car hydrants—construction, maintenance, opening and closing, . . .	2,003 70	
Standpipe bases—construction and maintenance, . . .	62 29	
Watering carts—repairs and storage, . . .	900 96	
For use of teams, as per pay rolls, . . .	1,045 63	
For use of teams, as per contracts, . . .	13,199 65	
American Car Sprinkler Company, as per contracts, . . . . .	9,816 25	
Inspector, . . . . .	749 25	
Inspector's horse and carriage, . . . . .	181 77	
	<hr/>	
	\$28,220 55	
Unexpended balance, . . . . .	98 85	\$28,319 40
	<hr/>	

## WORK ITEMIZED.

### BRIDGES.

#### REPAIRS AND CARE.

	Description of Work.	Cost.
Armory street, over Boston and		
Albany Railroad,	Floor repairs and care,	\$6 77
Berkshire street, I.O.,	Floor repairs,	12 99
Ludlow,	Floor repairs,	37 05
Main street, I.O.,	Floor repairs,	8 61
South street, over Mill river,	Arch repairs and new concrete	
	invert,	2,543 25
North end,	New stringers in part, new	
	under and top floors,	
	and inspection,	4,770 46
Old toll,	Minor repairs, care and in-	
	spection,	472 50
Plainfield street,	New top floor and sidewalk	
	repairs,	108 05
St. James Avenue, over Boston		
and Albany Railroad,	New under and top floors,	666 96
South end,	New stringers and under	
	floor in part and new	
	top floor,	2,423 40
Sundry bridges,	Care,	11 56
		<hr/>
		\$11,060 90





## STREET CONSTRUCTION.

## MACADAM BUILT BY PRIVATE PARTIES.

Street.	Limits.	Built by	Length in feet.	Area in sq. yds.
*Bay street,	Catharine to Princeton,	Springfield Street R.R. Co.,		506
*Central street, Huntington street,	Mill to Hancock,	Springfield Street R.R. Co., W. H. Dexter,	643	480
*North Main street,	Carew street northerly, Springfield Street R.R. Co.,		12,112	
			<hr/> 643	<hr/> 15,241

\* Length heretofore included in table of macadamized streets.

## PAVING.

Street.	Length.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
*Cypress street, Hampden street,	Main street westerly,	Granite blocks,	459	1,700	\$0 70 +	\$1200 87
**Main street,	Main street westerly, West side, Hampden to State, East side Worthington to State,	Bitulithic, Cleo-resinate wood blocks,	212 2,091	821 11,981	2 06 + 3 50 +	1693 04 41,975 23
Main street,	At State street inter- section, Utah to Central,	Syracuse brick, Bitulithic,	6 1,563	40 5,065	2 44 2 20 +	97 60 12,479 82

PAVING CONTINUED.

Street.	Length.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	2 05	\$5,293 01
			5,101	22,787		\$62,739 57

\* Old blocks—cost not included.

\*\* Average length.

MACADAM REPLACED BY PAVING.

Street.	Limits.	Length in feet.	Area in sq. yds.
Cypress street,	Main street westerly,	459	1,700
Hampden street,	Main street westerly,	212	653
Maple street,	High to Central street,	1,563	3,407
Taylor street,	Main to Dwight street,	770	1,851
		3,004	7,611

GRANITE BLOCK PAVING REPLACED BY OTHER PAVING.

Street.	Limits.	Length in feet.	Area in sq. yds.
* Main street,	West side, Hampden to State street,	2,091	11,081
Main street,	East side, Worthington to State street,		
	At State street intersection,	6	40
		2,097	12,021

\* Average length.

## STREET CONSTRUCTION.

## MACADAM AND GRAVEL RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Long Hill street,	South street easterly,	174	480	\$0 24+	\$118 77
North Main street,	Carew st. northerly,	6,295	21,982	26+	5,925 08
South street,	Long Hill street northerly,	1,400	4,222	24+	1,044 77
South street,	Long Hill street southerly,	1,038	2,440	24+	603 80
State street,	South side, Oak to Hawley street,	2,294	6,187	19+	1,210 50
		11,201	35,311		\$8,902 02

## STREET REPAIRS—INCIDENTAL.

		Cost.
Acushnet avenue,	Macadam and inlets,	\$28 74
Alden street,	Macadam,	41 75
Allen street,	Macadam, gravel and miscellaneous,	1,602 39
Andrew street,	Gravel,	34 46
Armory street,	Macadam, gravel, miscellaneous and inlets,	297 32
Bay street,	Macadam, gravel, miscellaneous and inlets,	174 35
Bay road,	Gravel,	114 62
Belmont avenue,	Macadam, gravel, miscellaneous and inlets,	721 28
Berkshire street,	Gravel and inlets,	692 30
Birnie avenue,	Miscellaneous and inlets,	154 34
Bond street,	Macadam, miscellaneous and inlets,	65 63
Boston road,	Gravel and miscellaneous,	2,747 65
Bowdoin street,	Miscellaneous, gravel and inlets,	46 32
Bowles street,	Gravel,	36 20
Boylston street,	Macadam and miscellaneous,	27 31
Bridge street,	Miscellaneous, macadam and inlets,	126 05
Buckingham street,	Gravel and inlets,	25 99
Burr street,	Gravel,	71 35
Carew street,	Macadam, gravel, miscellaneous and inlets,	349 91
Cass street,	Macadam and miscellaneous,	21 18
Cedar street,	Macadam,	23 45
Central street,	Macadam and inlets,	233 15
Charles street,	Macadam,	

PAVING CONTINUED.

Street.	Length.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	2 05	\$5,293 01
			5,101	22,787		\$02,739 57

\* Old blocks—cost not included.

\*\* Average length.

MACADAM REPLACED BY PAVING.

Street.	Limits.	Length in feet.	Area in sq. yds.
Cypress street,	Main street westerly,	459	1,700
Hampden street,	Main street westerly,	212	653
Maple street,	High to Central street,	1,563	3,407
Taylor street,	Main to Dwight street,	770	1,851
		3,004	7,611

GRANITE BLOCK PAVING REPLACED BY OTHER PAVING.

Street.	Limits.	Length in feet.	Area in sq. yds.
*Main street,	West side, Hampden to State street,	2,091	11,981
Main street,	East side, Worthington to State street, At State street intersection,	6	40
		2,097	12,021

\* Average length.

Liberty street,	Macadam, gravel, miscellaneous and inlets,	\$704 18
Locust street,	Macadam,	68 04
Lombard street,	Macadam and inlets,	42 15
Long Hill street,	Gravel and inlets,	715 68
Loring street,	Macadam and inlets,	
Manhattan street,	Gravel,	20 48
Main street,	Macadam, miscellaneous and inlets,	966 88
Main street, I.O.,	Macadam, gravel and inlets,	295 57
Maple street,	Macadam, miscellaneous and inlets,	179 83
Margaret street,	Macadam and inlets,	28 25
Mattoon street,	Macadam and inlets,	28 18
Mill street,	Macadam, miscellaneous and inlets,	171 12
Monroe street,	Gravel and inlets,	57 44
Murray Hill avenue,	Macadam and gravel,	117 67
Myrtle street, I.O.,	Gravel, miscellaneous and inlets,	148 24
North street,	Macadam,	54 18
Northampton avenue,	Gravel and miscellaneous,	66 78
North Main street,	Macadam, miscellaneous and inlets,	75 29
Oak street,	Gravel, macadam and inlets,	40 90
Oak street, I.O.,	Gravel, macadam and inlets,	167 05
Oakland street,	Macadam, gravel and inlets,	63 22
Palmer avenue,	Macadam and inlets,	44 25
Park street,	Macadam and inlets,	47 40
Parker street, I.O.,	Miscellaneous, gravel and inlets,	484 19
Pasco street, I.O.,	Gravel,	75 58
Patton street,	Macadam and inlets,	34 79
Pomona avenue,	Inlets,	59 83
Pearl street,	Miscellaneous, macadam and inlets,	42 55
Pine street,	Macadam and inlets,	28 13
Pineywoods avenue,	Gravel and inlets,	180 11
Plainfield street,	Miscellaneous, macadam and inlets,	135 18
Plumtree road,	Gravel,	24 36
Portland street,	Inlets,	102 25
Princeton street,	Macadam and inlets,	59 37
Prospect street,	Miscellaneous and gravel,	56 88
St. James avenue,	Gravel, macadam, miscellaneous and inlets,	275 38
South street,	Miscellaneous, gravel, macadam and inlets,	672 13
Spring street,	Macadam and inlets,	141 32
Springfield street,	Macadam, miscellaneous and gravel,	218 89
State street,	Macadam, miscellaneous and inlets,	
Stebbins street,	Gravel and inlets,	

rrace,	Macadam,	\$45 18
street,	Miscellaneous and macadam,	50 12
avenue,	Macadam, gravel and inlets,	197 48
streets.	Miscellaneous, on which sums less than \$20.00 have been expended,	1,492 '13
street,	Macadam and inlets,	62 33
reet,	Macadam, miscellaneous and inlets.	54 89
street,	Gravel and inlets,	23 65
on street,	Miscellaneous and macadam,	39 60
road,	Miscellaneous and gravel,	70 30
reet,	Gravel and inlets,	27 55
reet,	Macadam, miscellaneous and inlets.	139 14
street,	Gravel,	49 00
street,	Inlets,	41 68
street,	Macadam, miscellaneous and inlets,	495 17
n avenue,	Gravel,	21 11
avenue,	Miscellaneous,	57 87
treet,	Macadam and inlets,	227 56
reet,	Macadam, miscellaneous and inlets,	68 97
d avenue,	Gravel and inlets,	73 98
treet,	Macadam and gravel,	167 02
am road,	Macadam, gravel, miscellaneous and inlets,	1,473 33
street,	Macadam and inlets,	84 41
t street,	Inlets,	107 86
t street,	Miscellaneous and inlets,	44 61
street,	Inlets,	27 56
le avenue,	Miscellaneous and inlets,	20 62
er street, I.O.,	Miscellaneous, gravel and inlets,	700 87
ngton street,	Macadam, miscellaneous and inlets,	567 96
reet,	Macadam and gravel,	49 79
		<hr/> \$27,198 93

## SIDEWALKS LAID AND CURBING SET.

	Material.	Sidewalks. Description.	Length of Curbing,		
			4"	6"	10"
street,			40		
et,	Brick,	Relaid,	12		
t avenue,			49		
street,	Brick,	Relaid,	34	7	
treet,	Brick,	Relaid,			

Liberty street,	Macadam, gravel, miscellaneous and inlets, \$704 16
Locust street,	Macadam, 68 04
Lombard street,	Macadam and inlets, 42 15
Long Hill street,	Gravel and inlets, 715 68
Loring street,	Macadam and inlets, 20 98
Manhattan street,	Gravel, 20 48
Main street,	Macadam, miscellaneous and inlets, 966 88
Main street, I.O.,	Macadam, gravel and inlets, 295 57
Maple street,	Macadam, miscellaneous and inlets, 179 83
Margaret street,	Macadam and inlets, 28 25
Mattoon street,	Macadam and inlets, 28 18
Mill street,	Macadam, miscellaneous and inlets, 171 12
Monroe street,	Gravel and inlets, 57 44
Murray Hill avenue,	Macadam and gravel, 117 67
Myrtle street, I.O.,	Gravel, miscellaneous and inlets, 148 24
North street,	Macadam, 54 18
Northampton avenue,	Gravel and miscellaneous, 66 78
North Main street,	Macadam, miscellaneous and inlets, 75 29
Oak street,	Gravel, macadam and inlets, 40 90
Oak street, I.O.,	Gravel, macadam and inlets, 167 05
Oakland street,	Macadam, gravel and inlets, 63 22
Palmer avenue,	Macadam and inlets, 44 25
Park street,	Macadam and inlets, 47 40
Parker street, I.O.,	Miscellaneous, gravel and inlets, 484 19
Pasco street, I.O.,	Gravel, 75 58
Patton street,	Macadam and inlets, 34 79
Pomona avenue,	Inlets, 59 83
Pearl street,	Miscellaneous, macadam and inlets, 42 55
Pine street,	Macadam and inlets, 28 13
Pineywoods avenue,	Gravel and inlets, 180 11
Plainfield street,	Miscellaneous, macadam and inlets, 135 18
Plumtree road,	Gravel, 24 36
Portland street,	Inlets, 102 25
Princeton street,	Macadam and inlets, 59 37
Prospect street,	Miscellaneous and gravel, 56 88
St. James avenue,	Gravel, macadam, miscellaneous and inlets, 275 38
South street,	Miscellaneous, gravel, macadam and inlets, 672 13
Spring street,	Macadam and inlets, 141 32
Springfield street,	Macadam, miscellaneous and gravel, 218 89
State street,	Macadam, miscellaneous and inlets,
Stebbins street,	Gravel and inlets,



terrace,	Macadam,	\$45 18
er street,	Miscellaneous and macadam,	50 12
er avenue,	Macadam, gravel and inlets,	197 46
y streets,	Miscellaneous, on which sums less than \$20.00 have been expended.	1,492 '13
le street,	Macadam and inlets,	62 33
street,	Macadam, miscellaneous and inlets.	54 89
nice street,	Gravel and inlets,	23 65
ipson street,	Miscellaneous and macadam,	39 60
nam road,	Miscellaneous and gravel,	70 30
street,	Gravel and inlets,	27 55
n street,	Macadam, miscellaneous and inlets.	139 14
ara street,	Gravel,	49 00
on street,	Inlets,	41 68
ut street,	Macadam, miscellaneous and inlets,	495 17
ham avenue,	Gravel,	21 11
vick avenue,	Miscellaneous,	57 87
r street,	Macadam and inlets,	227 56
street,	Macadam, miscellaneous and inlets.	68 97
ford avenue,	Gravel and inlets,	73 98
e street,	Macadam and gravel,	167 02
raham road,	Macadam, gravel, miscellaneous and inlets,	1,473 33
ow street,	Macadam and inlets,	84 41
ont street,	Inlets,	107 86
lsor street,	Miscellaneous and inlets,	44 61
ott street,	Inlets,	27 56
iside avenue,	Miscellaneous and inlets,	20 62
ester street, I.O.,	Miscellaneous, gravel and inlets,	700 87
hington street,	Macadam, miscellaneous and inlets,	567 96
street,	Macadam and gravel,	49 79
		<hr/> \$27,198 93

## SIDEWALKS LAID AND CURBING SET.

reet.	Material.	Sidewalks. Description.	Length of Curbing, width.		
			4"	6"	10"
ory street,			40		
street,	Brick,	Relaid,	12		
ont avenue,			49		
ge street,	Brick,	Relaid,	34	7	
er street,	Brick,	Relaid,			

Street.	Material.	Sidewalks.		Length of Curbin width.	
		Description.		4'	8'
Chestnut street, I.O.,				302	
Clark street,				1,002	
Douglas street,	Brick,	New,		1,081	
Dresden street,	Tar concrete,	New,		232	
Elmwood street,	Brick,	Relaid,		6	
Fairbanks place,	Brick,	New,		83	
Fort Pleasant avenue,	Brick,	Relaid,			
	Tar concrete,	Recoated,			
Franklin street,	Cinder,	New,		1,034	
Frost street,	Brick,	Relaid,			
Greene street,				2,334	
Hickory street,				7	
High street,	Brick,	Relaid,			
Hall street,				278	
Hampden street,	Brick,	Relaid,			
Hampden street, I.O.,				651	
Liberty street,				6	
Locust street,	Tar concrete,	Recoated,			
*Main street,	Cement concrete,	New,			
	Brick,	Relaid,		163	
Maple street,					2
Marble street,	Brick,	Relaid,			
Massasoit street,	Brick,	New,		852	
Maynard street,	Tar concrete,	New,		682	
Medford street,					6
Morgan street,				14	
Myrtle street, I.O.,				130	
North Main street,					32
Oakland street,				820	
Palmer avenue,	Brick,	Relaid,			
Parker street,				78	
Patton street,				17	
Salem street,					137
Seventh street,				6	
Sheridan lane,	Brick,	New,		322	
State street,	Cinder,	New,		2,848	11
Stebbins street,				64	
Sumner avenue,				38	
Taylor street,					

t.	Material.	Sidewalks. Description.	Length of Curbing, width.		
			4"	6"	10"
street,	Brick,	New,			
	Brick,	Relaid,		171	
street,			23		
street,			16		
m avenue,	Tar concrete,	New,			
	Tar concrete.	Recoated,	52		
tops triangle,			415		
7 street,	Tar concrete,	Recoated,			
place,			285		
ngton street,	Brick,	Relaid,		12	
			13,833	528	319

ring defects due to Town brook.

## STREETS MADE PUBLIC.

	Limits.	Length in feet.
street,	Burr to Dawes street,	308
venue,	Thomas street to Wason avenue,	2,273
reet,	Spruce to Hancock street,	613
n street,	Nursery to Genesee street,	625
street,	Liberty to Franklin street,	270
street,	Dickinson to Orange street,	770
gton street,	North Main to Becket street,	643
street,	Sumner avenue to Forest Park,	450
o park,	Belmont avenue to Dickinson street,	1,330
t street,	Massasoit to Carew street,	800
street,	White to Orange street,	1,310
k street,	Heywood street easterly,	811
de terrace,	Forest Park avenue to Belmont avenue,	460
de terrace,	Belmont avenue, easterly,	475
		11,138

## STREETS RELOCATED.

ham road,	At Carlisle brook,	1,002
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## INVENTORY.

## STREET AND SEWER DEPARTMENTS.

Automobile, . . . . .	\$1,200 00
City yard, Lyman street, . . . . .	12,800 00
City yard, Logan street, . . . . .	7,000 00
Trap rock quarry, Westfield, . . . . .	225 00
Engine, engine house, trap rock crusher and tools, . . . . .	1,700 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Island pond, . . . . .	380 00
Gravel bank, Boston road, . . . . .	80 00
Six steam rollers, . . . . .	12,106 28
Steam roller house, . . . . .	1,277 82
Sixteen horses, wagons, sleighs, harness, etc., . . . . .	5,216 77
Thirty-four street watering carts, . . . . .	4,066 28
Tools and road materials, . . . . .	15,129 93
	<hr/>
	\$61,282 08

Information in detail as to quantities, kinds and costs of work done during the year, may be found elsewhere in this report.

It may be stated, however, that the street work of the most importance would probably include the grading and graveling of Carew street westerly from St. James avenue, laying of bitulithic pavement in Maple, Taylor and Hampden streets, and the paving of Main street with creo-resinate wood blocks, between Hampden and State streets.

The bitulithic pavement was laid by Warren Brothers Company of Boston, Mass., under a five year guarantee, and is the first of the kind laid in the city. It apparently meets with popular favor and probably more will be required on certain streets having heavy travel.

The widening of Maple street, between State and High streets, was done in accordance with an order of the City Council, approved by the Mayor on July 15, 1902, increasing the width of roadway at State street from 29.25

It is hoped that next year's appropriations will admit of the repaving of a number of our principal thoroughfares which are now paved with unsatisfactory material, and also that a considerable length of graveled streets may be macadamized. In the distribution of the latter work those streets leading to surrounding communities, as well as those heavily traveled, should be considered.

### SNOW AND ICE.

The winter of 1903-1904 was unusually severe and the cost of sanding walks, removing snow and ice, and repairs, has been much larger than heretofore. This rendered the expenditures for street construction correspondingly less, as no additional appropriation was made therefor.

Since the legislation of 1898, Revised Laws, Chapter 14, Sections 43 to 47, inclusive, the Springfield Street Railway Company has assisted but little in the removal of snow from streets containing their car tracks, but in February of this year an arrangement was made whereby that company agreed to remove, when necessary, the quantity of snow equivalent to that plowed from their tracks. This agreement was entered into so late last winter that the city profited but slightly by it, but the probabilities are that material advantage will result to the city during the present and subsequent winters.

### BRIDGES.

The Old Toll bridge was examined at the request of the Supervisors of Highways and Bridges by Mace Moulton, consulting engineer of New York, and his report to that Board, dated March 17, 1904, showed that the bridge was "far from perfectly safe," and in order to lessen the risk attending its use, among other precautions suggested, certain regulations limiting the rate of travel, weights of loads and the number of heavy loads on individual spans should be enforced, and I would state

that such conditions have been imposed. Certain repairs to the roof should be made, if the new bridge is not to be built soon.

The North End bridge was examined by the expert above referred to, to determine whether its strength would admit of the substitution of more durable material for the present two-inch spruce wearing surface. The report relating thereto, dated June 18, 1904, showed that the bridge could, with one exception, safely sustain the present dead and maximum live loads which could be imposed upon it, but would require considerable strengthening, if the more durable and heavier wearing surface was used. The estimated cost of the required changes in the bridge was so great that it was decided to abandon the idea of using the more durable material. The exception noted referred to the floor beams and specified that certain reinforcements should be made to properly carry the electric cars. These changes have been made by and at the expense of the Springfield Street Railway Company, in accordance with the suggestions and to the approval of Professor George F. Swain, civil engineer of Boston, member of the Massachusetts Railroad Commission.

The Springfield Street Railway Company has also substituted steel girder for the original tie construction under their tracks on the Plainfield street bridge over the Boston and Maine Railroad, subject to the consent of the Supervisors of Highways and Bridges and in accordance with suggestions and with the approval of Professor Swain.

The steel work of the Ludlow bridge is in need of painting and it is hoped that the work may be done during the coming summer.

### STREET WATERING.

Seventy-nine and sixteen hundredths miles of streets have been watered during the season, an increase of two and sixteen hundredths miles over the length watered in the year 1903.

About twenty-one miles of streets containing c  
watered by contract during the greater part of

three electric car sprinklers of the American Car Sprinkler Company of Worcester, Mass. The balance of the work has been done directly by the department, teams and drivers therefor having been hired.

It gives me pleasure to express thanks to Michael Roane and Arthur H. Woodward, first and second assistants.

I would also express my appreciation of the uniform courtesies extended during the year by Mayor Everett E. Stone, Alderman Francke W. Dickinson and Councilman William C. Bartlett, members of the Board of Supervisors of Highways and Bridges.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

BOARD OF ALDERMEN, December 27, 1904.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 27, 1904.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 28, 1904.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 28, 1904.

Approved.

E. E. STONE, *Mayor.*

## TABLE OF MACADAMIZED STREETS.

• Includes Macadam laid by Spfd. Street Ry. Co.

•• Macadam laid by Spfd Street Ry. Co.

† Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
† Agawam street,	Pecousic avenue to South street,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Allen street,	Mill to Randall avenue,	2,253	*7,935
Allendale street,		663	2,094
Andrew street,	State to Burr,	1,008	3,213
Arbor street,		437	1,222
Armory street,	Federal to Worthington,	793	3,240
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
† Avon place,		67	386
Bancroft street.		1,435	4,865
Barnes street,		180	561
Bay street,	St. James avenue to High- land division N.Y., N.H. & H.R.R.,	4,053	*13,466
Beech street,		528	1,303
Belmont avenue,	Woodside avenue to Oak- land street,	2,599	7,043
Belmont avenue,	Oakland street to White,		*5,889
Berkshire street,	State to Oak, I.O.,		**31,291
Bliss street,	Water to Main,	958	3,053
Bond street.		1,629	5,112
Bowdoin street,	St. James avenue to Wor- thington street,	1,152	3,837
Boylston street,		1,807	864
Bradford street,		862	2,935
Bridge street,	old toll bridge to Main, and Dwight to Chestnut,	1,210	4,755
Broad street,			



# *Report on Streets.*

23

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Brookline avenue.		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,407
Catharine street,	Bay to Dartmouth,	150	493
Cedar street,		1,962	6,655
Central street,		4,903	12,832
Central street,	Cedar to Pine,		**533
Central street,	Mill to Hancock,		**480
Charles street,	Liberty to Franklin,	618	1,888
Chestnut street,	State to Worthington, and east side, Allendale to City Hospital,	3,889	9,665
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clarendon street,	north from Worthington,	204	674
Clinton street,		703	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court Square av.,	689	2,052
Cross street,	Willow to Maple.	608	1,416
Cypress street,	Boylston to Fulton,	192	512
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855
East Hooker street.		679	1,786
Eastern avenue,		1,516	*15,297
Edwards street,		675	2,219
Elliott street,		1,007	3,312
Elm street,	N.Y., N.H. & H.R.R. to Court Square,	818	2,089

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Everett street,		1,500	4,859
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,	Talcott to Wason,	1,126	5,005
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,666
Forest Park avenue,	Sumner to Forest street,	752	3,846
Fort Pleasant avenue,	west side,	2,794	10,138
Franklin street,	Main to Charles, and Cass to Webster,	2,531	8,781
Fremont street,		778	2,593
Fulton street,		3,569	11,093
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
George street,	Maple easterly,	110	647
Gray's avenue,		560	1,300
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hampden street,		395	1,748
Hancock street,	Florence to State,	3,429	*11,613
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorne street,		540	1,374
Hebron street,		698	2,204
Hickory street,	Walnut to Eastern avenue, and Alden street east- erly,	2,386	6,424
High street,		2,563	5,544
Hillman street,		647	1,801
Holyoke street,		776	2,091
Howard street,	N.Y., N.H. & H.R.R. to Main street,	1,277	4,326
Hubbard avenue,		568	1,063
Huntington street,		643	†2,143
Ingraham avenue,		258	462
Jefferson avenue,			

# *Report on Streets.*

25

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
John street,		640	2,136
King street,	Walnut to Highland divi- sion N.Y., N.H. and H.R.R.,	2,885	*9,507
Lafayette street,		568	1,865
Lebanon street,		1,926	5,233
Liberty street,	Main street easterly, and Wolcott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chic- opee line,		**9,920
Linden street,		1,267	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Loring street,		707	2,294
Lyman street,	Chestnut to Spring,	734	2,544
Madison avenue,		529	1,657
Magazine street,	Lincoln to Armory,	734	2,434
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Oak to point 104 ft. east of Rogers avenue,	3,403	11,998
Main street, I. O.,	Oak to Ludlow bridge,		**9,979
Maple street,	State to High street, and top of hill to George street,	2,158	5,769
Marble street,		1,074	3,508
Margaret street,	Water to Main,	842	2,807
Market street,		961	1,792
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mulberry street,	Maple to Ridgewood place,	991	3,256
Myrtle street,		484	997
North street,	Carew to Waverly,	2,988	10,807
North Main street,	Carew to Chicopee line,	7,115	*37,180
Norwood street,		1,117	2,911
Oak street,		1,344	4,136

*Report on Streets.*

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Oak street, I. O.,	Berkshire to Main,	1,097	4,051
Oak street, I.O.,	Berkshire to Main,		**2,078
Oakland street,	Belmont ave. to Dickinson,	838	2,782
Olive street,		478	1,248
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow, and foot of hill to Maple,	865	2,545
Patton street,		1,031	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	South street to South street,	2,205	7,350
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344
Plainfield street,	B. & M. R. R. to West street, and Lowell to Washburn,	655	2,281
Plainfield street,	Washburn to Wason ave.,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597
Princeton street,	Bay to St. James avenue,	1,509	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Pyncheon street,		868	2,810
Quincy street,	Oak to Hancock,	1,359	3,878
Ringgold street,		730	2,432
Rutland avenue,		277	926
Rutledge avenue,		516	1,599
Salem street,	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,278
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895
Sheldon street,	Birnie avenue to N. Main,	651	2,027
Sherman street,	State to Bay,	1,528	5,078
South street,	Agawam st. to Mill river,	1,863	6,878
Spring street,		2,373	7,322
Springfield street,	Chestnut to dingle, and Hamburg street to Chicopee line,		

# *Report on Streets.*

27

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Spruce street,		699	1,737
State street,	Water to Main, City Li- brary to Federal, and Oak to Berkshire,	19,786	*72,323
Stearns Park avenue,	east of park,	259	461
Stebbins street,	Union to Quincy,	186	621
St. James avenue,	State to Highland division N.Y., N.H. & H.R.R.	5,470	15,557
St. James avenue,	State to end of track,		**5,213
Stockbridge street,		635	1,617
Summer street,	east of Spring,	567	1,512
Sumner avenue,	Long Hill street to Forest Park entrance,	3,215	15,227
Sumner avenue,	Long Hill street to White,		**11,631
Taylor street,		413	1,310
Temple street,		953	2,570
Tenth street,		1,577	4,451
Thompson street,		2,093	6,606
Townsley avenue,		138	214
Tyler street,	Oak to Hancock,	1,346	4,002
Union street,	Water to foot of hill, Maple to School, and Mul- berry to Eastern ave.,	6,088	19,878
Vernon street,		823	1,952
Vine street,		745	1,892
Vinton street,		612	2,465
Walnut street,	Mill to Pendleton avenue,	3,142	*6,565
Warriner avenue,		450	1,601
Wason avenue,	B. & M. R. R. to North Main street,	505'	1,718
Wason avenue,	B. & M. R. R. to North Main street,		**449
Water street,		5,145	16,525
Waverly street,		850	2,910
Webster street,		606	2,020
West street,		1,195	3,872
Westminster street,		1,911	6,388
White street,	Allen to Orange,	1,800	3,505

*Report on Streets.*

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wilbraham road,	State to Homer street,	2,579	11,427
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Water to Main,	922	3,016
William street,	N.Y., N.H. & H.R.R. to Main,	1,368	4,359
Willow street,	Union to State,	895	2,493
Winthrop street,		659	2,397
Worthington street,	Water to Main and Spring to St. James avenue,	4,234	*6,793
Yale street,	Dartmouth to Princeton,	863	2,686
York street,		1,000	2,997
Total,	- - - - -	<u>270,756</u>	<u>96,742</u>

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Belmont avenue,	Hall street westerly,	Catakill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Bridge street,	Main to Dwight,	Rock asphalt,	088	2,525	1900
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	160	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.,	Granite blocks,	256	1,471	1899
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Court street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	317	1,277	1897
Court Square avenue,	Court to Elm st.,	{ Rock asphalt, Syracuse brick,	193	503	1897
Cypress street,	Main street, westerly,	{ Rock asphalt, Syracuse brick,	—	330	1897
Dwight street,	State to Lyman,	Granite blocks,	459	1,700	1904
East Court street,	Main to Market,	Syracuse brick,	2,324	9,905	1896
Elm street,	Main to Court Square avenue,	Rock asphalt,	117	297	1900
Fort street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	343	949	1897
Hamden street,	Main to Water,	Granite blocks,	—	330	1897
Harrison avenue,	Main street, westerly,	Granite blocks,	670	1,770	1895
Liberty street,	Main to Dwight,	Bitulithic,	212	821	1904
	Chestnut to Cass,	Trinidad asphalt,	586	2,247	1896
		Syracuse brick,	1,399	4,571	1900

TABLE OF PAVED STREETS.—Continued.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year laid.
Liberty street,	Cass to Heywood avenue,	Syracuse brick,	1,147	3,971	1901
Lyman street,	Main to Chestnut,	Granite blocks,	1,305	4,599	1889
Main street,	Locust to Marble,	Syracuse brick,	840	4,381	1897
Main street,	Marble to William,	Syracuse brick,	1,762	8,307	1896
Main street,	William to Bliss,	Granite blocks,	1,148	5,475	1893
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood blocks, 3" x 3½" x 8",	1,899	10,798	1904
Main street,	Worthington to Hampden, west side,	Creo-resinate wood blocks, 3" x 3½" x 8",	382	1,183	1904
Main street,	Worthington to Hampden, east side,	Creo-resinate wood blocks, 4" x 4" x 8",	—	962	1903
Main street,	Hampden to Lyman,	Creo-resinate wood blocks, 4" x 4" x 8",	153	775	1903
Main street,	Lyman to Liberty,	Creo-resinate grooved wood blocks, 4" x 4" x 8',	484	2,780	1903
Main street,	Liberty to Sharon, east side,	Creo-resinate wood blocks, 4" x 4" x 8",	453	1,135	1903
Main street,	Liberty to Cypress, west side,	Granite blocks,	—	880	1890
Main street,	Cypress to Sharon, west side,	Granite blocks,	—	580	1891
Main street,	Sharon to Emery and Franklin,	Granite blocks,	545	2,920	1891



TABLE OF PAVED STREETS.—*Concluded.*

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,905	1897
Main street,	Emery to Sargeant, west side,	Catskill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catskill and Metro- politan blocks,	—	163	1903
Maple street,	High to Central,	Bitulithic,	1,563	5,665	1904
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main to library,	Granite blocks,	1,019	4,034	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
Summer street,	Autumn to Kibbe avenue,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,	Granite blocks,	787	2,635	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1890
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
White street,	Allen to Orange,	Syracuse brick,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Total			42,075	159,182	



# THIRTY-SIXTH ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

---

SPRINGFIELD, MASS., December 24, 1904.

*the Mayor and Board of Aldermen.*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 10, 1904.

### RECEIPTS.

appropriation. . . . .	\$31,000 00	
transfer from contingencies, . . . . .	3,200 00	
meter entrances, fees, . . . . .	6,181 50	
meter entrances, for labor and material, . . . . .	2,050 77	
on departments and private parties, bills rendered, . . . . .	1,979 94	
	<hr/>	\$44,412 21

### EXPENDITURES.

#### REGULAR.

installing and connecting private drains, . . . . .	\$1,844 23
7 teams, uncredited balance, . . . . .	433 69
7 yard, . . . . .	982 66
engineering, . . . . .	451 92
materials on hand, . . . . .	283 72
ice and general expenses, . . . . .	937 87
salary of first assistant superintendent, . . . . .	1,200 00
works, {	
cleaning, . . . . .	3,886 06
construction, . . . . .	25,313 99
flushing, . . . . .	2,136 63
repairs, . . . . .	2,138 17
	<hr/>
Amount carried forward,	\$39,608 94

Amount brought forward,	\$39,608 94	
Supplies, . . . . .	190 23	
Tools, . . . . .	727 66	
Work and material billed departments, . . . . .	1,106 57	
Work and material billed private parties, . . . . .	763 31	
	<u>\$42,396 71</u>	
Unexpended balance, . . . . .	2,015 50	\$44,412 21

## SPECIAL.

Mill River Valley sewer :—		
Limit of expenditure, . . . . .		\$92,300 00
Expended prior to December 10, 1903, . . . . .	\$52,026 94	
Expended since December 10, 1903, . . . . .	20,573 14	
	<u>72,600 08</u>	
Unexpended balance, . . . . .		\$19,699 92

## BILLS COMMITTED TO COLLECTOR OF TAXES.

Bills unpaid December 10, 1903, . . . . .	\$399 68	
Bills committed during the year 1904, . . . . .	1,936 77	
	<u>\$2,336 45</u>	
Bills paid during the year 1904, . . . . .	\$1,989 94	
Abatements and corrections, . . . . .	48 75	
	<u>2,038 69</u>	
Bills unpaid December 10, 1904, . . . . .		\$297 76

## SEWER CONSTRUCTION CLASSIFIED.

Sizes vitrified clay pipe,	8"	10"	12"	15"	18"	24"	Total.
Length new construction,	449'	1,172'	2,715'	1,918'	2,353'	402'	9,009'
Length reconstruction,			668'	1,861'	1,305'	200'	3,534'
Total length,	449'	1,172'	3,383'	3,279'	3,658'	602'	12,543'
Sizes brick sewer,	2'-0" x 3'-0"	2'-2" x 3'-3"	3'-4" x 6'-9"	Total.			
Length new construction,		2,409'					2,409'
Length reconstruction,	597'				865'		1,462'
Total length,	597'	2,409'			865'		3,871'

SEWER CONSTRUCTION ITEMIZED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Allen avenue, flush gate.....		....	....	\$27 37
Armory street, northerly from Carew.	Clay	283	8"	107 71
Bay street, flush gate.....		....	....	15 12
Berkshire street, easterly from Oak ..	Clay	326	12"	305 51
Carew street, flush gate ... ..		....	....	20 41
Cemetery brook, easterly from Morris street (completion) .....	Clay	108	24"	384 86
Central street, Mill street to Mill river, overflow .....	Clay	40	24"	136 83
Central street, Mill to Hancock, re- laying .....	Brick	597	2'-0" x 3'-0" } egg shape }	2,115 29
Eastern avenue, manhole .....		....	....	31 10
Florentine gardens, flush gate .....		....	....	22 83
Fort Pleasant avenue, manhole .....		....	....	46 42
Gordon street, Pasadena avenue to White street .....	Clay	618	15"	555 79
Greenwich street, Becket to North Main (incomplete).....	Clay	70 278	12" } 10" {	316 31
Grenada terrace, easterly from Dick- inson street .....	Clay	220 310	18" } 15" {	708 45
Hampshire street, I. O., flush gate..		....	....	25 42
Hayden avenue, flush gate .....		....	....	24 11
High street, easterly from Maple, re- laying .....	Clay	523 567 550	18" } 15" { 12" }	1,958 92
Johnson street, extension to Pasa- dena avenue.....	Clay	1,468	18"	2,722 69
Liberty street, near Main, relaying..	Clay	118	12"	179 19

## SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Long Hill street, manhole and flush gate .....		.....	.....	\$61 71
Main street, manholes .....		.....	.....	75 72
Main street, I. O., manhole .....		.....	.....	33 07
Maple street, manholes .....		.....	.....	170 32
Maple street, Park to High, relaying.	Clay	225	18"	505 21
Maple street, State to Temple .....	Clay	315	18"	675 51
Maplewood terrace, flush gate .....		.....	.....	22 21
*Mill River Valley sewer, Hickory street easterly to R. R. .... Railroad easterly to Hickory street (incomplete) .....	Brick	{ 968 1,441	{ 2'-2" x 3'-3" egg shape }	20,575 14
Myrtle street, I. O., southerly from Hampshire .....	Clay	126	10"	100 99
Norfolk street, southerly from Wilbraham road .....	Clay	300 300	15" 12" }	566 08
Oakland street, northerly from Dickinson .....	Clay	254 350 170	24" 18" 12" }	1,619 20
Ormond street, Belmont to Sumner avenue .....	Clay	275	10"	252 85
Park street, Willow to Maple, relaying .....	Clay	200 557	24" 18" }	1,431 05
Peabody lane, westerly from Willow street .....	Clay	216	10"	234 47
Plainfield street, Newland to Rose-land (completion) .....	Brick	....	....	40 97
Pomona avenue, northerly from Sumner .....	Clay	580	12"	439 94

\* 1,441 feet not yet connected with sewer system.

SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
way, Liberty to Ferry street ..	Clay	210	12"	\$402 70
street, manhole .....		....	....	42 90
nd avenue, northerly from Carew street .....	Clay	277	10"	217 32
nd street, westerly from Plain- field (completion) .....	Clay	200 173	15" 12" }	412 03
d avenue, outfall .....		....	....	1,321 42
treet, flush gate .....		....	....	21 34
reet, manhole .....		....	....	45 27
avenue, flush gate .....		....	....	9 59
street, easterly from Maple ..	Clay	40	15"	34 79
reet, manholes .....		....	....	76 43
street, easterly from Dickin- son .....	Clay	166	8"	76 92
gton street, flush gate .....		....	....	23 58
street, southerly from Gordon.	Clay	500	12"	458 44
st street, extension to Revere.	Clay	450 386	15" 12" }	947 38
nam avenue, manholes .....		....	....	146 28
i street, manholes .....		....	....	53 61
ington street, Thompson street to St. James avenue, reconstruction .....	Brick	865	3'-4" x 6'-9" egg shape }	4,243 46
ngton street, Kibbe avenue o Federal street, relaying .....	Clay	794	15"	826 90
		16,414		\$45,887 13

le walls and arch.

## SEWERS ABANDONED—1904.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Central street, Mill River to Hancock street .....	Cem.	645	18"	\$715 35
Dwight street to Garden brook .....	Brick	530	5'-0" x 5'-3"	3,015 70
Garden brook to Spring street .....	Cem.	764	18"	893 88
High street, easterly from Maple...	Cem.	810 844	15" } 12" }	1,331 39
Liberty street, near Main .....	Cem.	118	12"	88 50
Maple street, Park to High .....	Cem.	274	18"	294 91
Peabody lane, Willow st., westerly..	Cem.	212	12"	162 76
Park street, Willow to Maple .....	Cem.	745	18"	801 81
Water street extension .....	.....	.....	18"	8 47
Worthington street, Kibbe avenue to Federal street .....	Cem.	794	12"	778 12
		5,736		\$8,091 49

## SUMMARY.

DESCRIPTION.	Length in Feet.	Cost.
Brick sewers built by regular appropriation .....	1,462	\$6,399 79
Brick sewers built by special appropriation .....	2,409	20,573 14
Clay pipe sewers built by regular appropriation .....	12,543	16,598 04
Flush gates and manholes built by regular appropriation .....		994 81
Outfall .....		1,321 42
	16,414	\$45,887 13
Sewers abandoned .....	5,736	8,091 49
Net addition carried to sewer table .....	10,678	\$37,795 64



## SEWERS CLEANED AND REPAIRED.

	COST OF	
	Cleaning.	Repairs.
Armory street, . . . . .		\$20 70
Belmont avenue, . . . . .	\$28 07	17 07
Cedar street, Indian Orchard, . . . . .	16 75	
Central street, . . . . .	84 52	47 71
Clarendon street, . . . . .	23 06	
Clinton street, . . . . .	19 53	
Cypress street, . . . . .	51 25	
Dickinson street, . . . . .	18 82	
Douglas street, . . . . .		47 70
Elm street, . . . . .		65 31
Florida street, . . . . .	11 09	
Forest Park avenue, . . . . .		13 98
Fort Pleasant avenue, . . . . .		25 46
Franklin street, . . . . .		46 04
Garden brook sewer, . . . . .	1,030 33	
Garfield street, . . . . .		17 66
Glenwood sewer, . . . . .		50 16
Hampshire street, Indian Orchard, . . . . .	15 75	
Hickory street, . . . . .	197 62	
High street, . . . . .		17 26
King street, . . . . .	15 97	
Liberty street, . . . . .		11 57
Locust street, . . . . .	23 44	
Lowell street, . . . . .	116 66	
Main street, . . . . .	185 96	
Maple street, . . . . .		16 10
Melrose street, . . . . .		12 00
Morgan street, . . . . .		13 93
North Main street, . . . . .		25 04
Parkwood street, . . . . .	13 06	
Sanford street, . . . . .	36 50	
State street, . . . . .		95 55
Sewer connections, . . . . .	630 25	89 55
Sundry sewers, costing less than \$10.00, . . . . .	30 78	234 68
Tenth street, . . . . .		71 89
Town brook, filling between Worthington and State streets, . . . . .		779 29
Union street, . . . . .	31 87	

	COST OF	
	Cleaning.	Repairs.
Wason avenue, . . . . .		\$70 02
William street, . . . . .	\$22 12	
Windsor street, . . . . .		11 41
Worcester avenue, . . . . .		16 52
Worthington street, . . . . .	47 12	321 57
Worthington street outlet, . . . . .	1,235 54	
	<hr/>	<hr/>
	\$3,886 06	\$2,138 17

The work of the season that will ultimately prove of the most importance consists of the extension of the Mill River Valley sewer, the contract therefor having been let to D. J. Curtis of this city on July 29, 1904. The construction was attended by some serious difficulties, so that but 53% of the length under contract was completed at the close of the fiscal year. It is expected that the balance will be finished in the early part of next season.

In accordance with an order of the Board of Aldermen, approved June 25, 1901, the Town brook, under and near the easterly sidewalk of Main street, between Worthington and State streets, the use of which for sewage purposes was abandoned some years ago, was filled with gravel and sand. The purpose of this was to prevent the undermining of the Main street sidewalk.

I would call your attention to the defective condition of the State street sewer, easterly from Chestnut street, which has required numerous repairs during the past few years. I would recommend that this old sewer be abandoned, and that the State street sewer built in 1903, from Dwight street easterly for a distance of 711 feet, be extended as soon as possible. This would furnish proper sewer accommodations for the property on the southerly side of State street, east of Myrtle street, and also reduce the liability to accident due to the undermining of the street surface over the line of the present sewer.

I would respectfully call your attention to the

great many cellars in certain sections of the city at times of heavy rains. This condition is undoubtedly due to inadequate trunk sewers, and is accounted for by the rapid growth of the city beyond that expected at the time of their design, and the consequent demand for sewer accommodations.

The Pine street and Mill street sewers or sewers tributary thereto seem to cause most of this trouble and some remedy should be provided for it as soon as possible.

The estimated cost of completing sewer work which has been ordered by the Board of Aldermen to date is practically \$36,000, which is about \$10,000 greater than last year.

Liberal appropriations for sewers and drains should be made for next season, in order that this very important work, which safeguards the health of the community, need not be slighted.

It gives me pleasure to express thanks to Michael Roane, Assistant Superintendent of Streets and Sewers, who has had general oversight over sewer work, for his valuable assistance, and to Aldermen Dickinson, Greenleaf and Ford, members of the Committee on Sewers and Drains, for the uniform courtesies they have extended during the year.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets and Sewers.*

*Report on Sewers.*

BOARD OF ALDERMEN, December 27, 1904.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 27, 1904.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 28, 1904.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 28, 1904.

Approved.

E. E. STONE, *Mayor.*

# CITY OF SPRINGFIELD,

## SEWER CONSTRUCTION TO DECEMBER 10, 1904.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly.	301	15"	Clay	\$497.38
	275	12"	"	
Acushnet avenue, Main street, easterly .....	294	20"	"	298.94
	279	18"	"	
	271	15"	"	
	26	12"	"	
Adams st., Main st. to Town brook .....	149	18"	"	\$322.22
Town brook, easterly .....	890		Brick	66.68
				388.90
Alden st., Hancock to East- ern ave .....	595	18"	Cem.	1,529.54
	820	15"	"	
Eastern ave., to Wilbraham ave. ....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st	499	10"	"	250.86
				2,691.79
Alderman st., Dickinson st., easterly .....	296	18"	"	916.78
	304	15"	"	
	300	12"	"	
	137	10"	"	
Alexander street, North street, easterly .....	288	10"	"	188.48
Alfred st., Birnie ave., easterly.	377	10"	"	.....
Allen ave., Allen st., easterly.	338	10"	"	232.73
Allen st., Mill river to Randall ave. ....	902	24"	"	2,408.92
	383	18"	"	1,598.59
	474	15"	"	
	580	12"	"	
	1,603	12"	"	
Randall ave., to Plum Tree road .....	1,401	10"	"	984.62
				5,873.71
Allendale st., North st., easterly	272	12"	"	401.43
	340	10"	"	
Amaron st., State st., southerly	349	10"	"	222.90
Amherst street, Harvard street, northerly .....	441	12"	Cem.	74.90
	25	10"	Clay	23.78
Princeton to Monmouth st..	512	12"	"	622.90
	191	10"	"	
				721.58

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Andrew st., State st., northerly	463	20"	Clay	\$1,753.67
	422	18"	"	
	382	12"	"	
Arbor st., Butler to Carew st..	398	12"	"	318.05
Arch st. (see Garden brook).				
Armory Hill Sewer (see private ways).				
Armory st., B. & A. R. R. to Liberty st. ....	690	15"	Clay	\$1,165.47
	360	12"	"	
	271	10"	"	
Liberty to Sullivan st. ....	450	1 <sup>1</sup> / <sub>2</sub> x 10 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> x 9"	Brick	2,439.42
	476	1 <sup>1</sup> / <sub>2</sub> x 8 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> x 6"	"	
Sullivan to Carew st. ....	156	24"	Clay	975.77
	267	20"	"	
	290	12"	"	
Carew st., northerly .....	288	8"	"	107.71
Springfield st., southerly...	31	20"	"	317.00
	146	18"	"	
Summer st., southerly .....	374	12"	"	384.78
Worthington st., southerly...	570	15"	Cem.	658.06
				6,048.21
Ashley st., Cedar st., easterly	65	18"	"	80.45
	580	15"	"	1,453.92
	697	12"	"	
				1,534.37
Auburn st., Fulton st., easterly	397	12"	Clay	655.06
	335	10"	"	
Autumn st., Summer to Worth- ington st. ....	239	15"	"	715.29
Bancroft st., Garden brook to Chestnut st. ....	1,361	3 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 5 <sup>1</sup> / <sub>2</sub> x 0"	Brick	8,914.04
including Chestnut st., Banc- croft to Montmorenci st..	379	3 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 9"	"	
Montmorenci st., Chestnut st., easterly .....	43	3 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 9"	"	
Bay st., St. James avenue to Pleasant st. ....	250	15"	Clay	715.01
	245	12"	"	
	228	10"	"	
Florida to Pleasant st. ....	235	12"	"	321.02
Florida to Sherman st. ....	304	20"	"	1,092.89
	377	18"	"	
	812	15"	"	945.16
Sherman to Clarendon st. ....	151	8"	Cem.	46.82
Catharine to Clarendon st. ....	194	10"	Clay	200.66
Bowles to Cambridge st. ....	1,037	2 <sup>1</sup> / <sub>2</sub> x 8 <sup>1</sup> / <sub>2</sub> x 4 <sup>1</sup> / <sub>2</sub> x 0"	Brick	8,056.62
	360	2 <sup>1</sup> / <sub>2</sub> x 2 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> x 3"	"	
Cambridge st., easterly .....	247	8"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Beacon st., Eastern ave. to Colton st. ....	250	10"	Clay	\$119.21
Colton st., easterly .....	124	8"	"	3.65
Beaudry st., I. O., Main st., southerly .....	300 270	12" 10"	"	\$122.86 745.95
Beaumont st., Belmont ave., northerly .....	250 431	12" 10"	"	
Becket st., Arch to Hooker st.	1,048	24"	"	403.87
Beech st., Central st., northerly.	410	10'	Cem.	....
Beechwood ave., Sumner to Spruceland ave. ....	595	12"	Clay	74.20
Belgrade place, Walnut st., westerly .....	220 140	8" 6"	"	19.09
Bellevue ave., Belmont ave., easterly .....	300 300 194	18" 15" 12"	"	....
Dickinson st., westerly ...	744	10"	"	....
Belmont avenue, Fort Pleasant ave., easterly .....	90	10"	"	93.92
Mill river to Woodside ave.	954	20"	"	2,698.67
Woodside ave. to Litchfield st.	660 445 595 550	2'-0"x3'-0" 1'-10"x2'-9" 1'-8"x2'-6" 1'-6"x2'-3"	Brick	11,750.19
Litchfield street to Kenwood Park .....	432 493	20" 18"	Clay	
Kenwood Park to Sumner ave	301 403 616	15" 12" 10"	"	
Sumner ave., southerly .....	830 819	3'-4"x5'-0" 3'-0"x4'-6"	Brick	
Belmont court, Belmont ave., southerly .....	216	10"	Clay	8,179.57
Benton st., State st., southerly.	301 300 247 320	12" 10" 8" 8"	"	25,016.28
Berkeley st., Princeton to Mon- mouth st. ....	483	12"	"	146.76
Berkshire st., I. O., Oak to Myrtle st. ....	701	12"	Cem.	513.96
Oak st., easterly .....	326	12"	Clay	419.68
Chestnut st. to Myrtle st. ...	577	12"	"	933.64
Besse place, Main st., westerly.	290	10"	"	517.22
				946.21
				305.51
				545.74
				1,797.46

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Birnie avenue, Wason avenue, northerly.....	362	24"	Clay	\$579.11
Wason ave., southerly.....	350	18"	"	1,024.75
	417	15"	"	
Worcester street extension, northerly to Grace st....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st....	144	12"	"	....
Douglas st., northerly.....	292	24"	Clay	1,149.93
	303	20"	"	
	304	15"	"	
	144	10"	"	
Douglas st. to Thomas st....	373	1' 10" x 2' 9"	Brick	1,319.73
Thomas st., southerly.....	312	20"	Clay	768.74
	316	18"	"	\$4,842.36
Bliss st., from Main to N. Y., N. H. & H. R. R.....	1,284	12"	Cem.	1,150.71
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).....	203	12"	"	....
Bond st., east from Garden brook sewer.....	341	2' 0" x 3' 0"	Brick	1,580.25
end of brick sewer to Chest- nut st.....	959	24"	Clay	2,195.84
				3,776.09
Bowdoin st., Worthington st., southerly.....	673	15"	Cem.	740.00
Worthington to Ingersoll grove	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight, Catharine st., easterly and northerly.....	752	15"	"	1,058.67
	250	12"	Clay	50.82
	275	8"	"	
Boylston st., Cypress to Clinton street.....	610	18"	Cem.	1,109.49
	346	15"	"	1,638.72
Brace street, Belmont avenue, northerly.....	137	10"	Clay	....
Bradford st., North Main to Fulton st.....	352	15"	Cem.	1,301.09
	758	12"	"	
Bridge st., Main st. to Conn. River.....	798	12"	"	718.79
	275	15"	Clay	429.14
Main to Chestnut st.....	1,158	2' 0" x 3' 0"	Brick	5,414.20
				6,562.13
Broad st., Hanover to Main st..	970	15"	Cem.	1,240.75
Brookline avenue, North st., easterly.....	328	12"	Clay	29.57
	171	10"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Brown st., Yale to Bay st. ....	483	10"	Cem. }	\$357.65
	21	8"	" }	
Buckingham place, Bay street, easterly .....	235	10"	Clay	168.97
Buckingham st., Bay to Claren- don st. ....	651	12"	" }	\$597.24
Bay st., southerly .....	35	12"	Cem. }	
State to Bay st. ....	305	18"	Clay }	1,158.40
	345	15"	" }	
	675	12"	" }	1,755.64
Burr st., Andrew st., easterly ..	570	12"	"	428.83
Butler st., Chestnut to Cass st.	1,268	20"	"	2,021.96
Cass st., easterly .....	321	20"	"	520.71
				2,542.67
Calhoun st., North Main to North st. ....	853	12"	"	631.40
North st., easterly .....	300	8"	"	227.19
				858.59
Cambridge street, Bay street, southerly .....	276	20"	" }	1,100.88
	331	18"	" }	
	266	15"	" }	396.35
	302	12"	" }	
	278	10"	" }	
Card-factory pond—see private ways.				1,497.23
Carew st., Main st. to Garden brook (cost shown under Clinton st.) .....	250	4'-6"x6'-9"	Brick	....
	32	5'-0"	"	....
Garden brook to Prospect st.	1,456	4'-3" cir.	" }	21,913.22
	1,257	3'-0" cir.	" }	
	791	2'-8" cir.	" }	
Massasoit street, easterly ...	580	18"	Cem.	671.51
	200	12"	"	153.28
Armory st. to Liberty st. ....	1,101	10"	Clay }	787.87
	448	8"	" }	
				23,525.88
Cass st., Liberty to Franklin st.	500	12"	" }	457.99
	163	10"	" }	
Linden st., southerly .....	596	15"	" }	892.07
Linden st., northerly .....	224	12"	" }	
				1,350.06
Catharine st., Dartmouth to McKnight st. ....	833	2'-0"x3'-0"	Brick	4,428.92
State to McKnight st. ....	348	15"	Clay }	1,348.95
	438	12"	" }	
	333	10"	" }	5,777.87

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cedar st., Pine to Walnut st. . . . .	180	3'-10" x 5'-9"	Brick	\$889.35
	1,074	3'-8" x 5'-6"	"	6,206.73
Pine st., westerly . . . . .	378	12"	Cem.	288.32
				\$7,384.40
Cedar st., I. O., Main st. to river . . . . .	433	2'-0" x 3'-0"	Brick	2,001.44
Main st. to Center st. . . . .	274	12"	Clay	198.76
Cemetery brook (see private ways).				2,200.20
Central st., Main st., easterly . . .	99	15"	Cem.	147.60
	546	12"	"	385.49
Main to near Maple st. . . . .	527	2'-0" x 3'-0"	Brick	2,275.08
	700	1'-8" x 2'-6"	"	
near Maple street to Sterns terrace . . . . .	769	18"	Clay	1,211.88
	105	12"	"	199.95
Sterns terrace to Cedar st. . . . .	334	18"	Cem.	102.50
Pine st., westerly . . . . .	500	12"	Clay	481.38
Hancock st. to Pine st. . . . .	866	15"	Cem.	1,328.57
	339	12"	"	
	335	12"	Clay	514.05
	310	10"	"	
Hancock st. to Mill st. . . . .	597	2'-0" x 3'-0"	Brick	2,115.29
Mill st. to Mill river. . . . .	40	24"	Clay	136.83
Central st. ave., Knox to Cen- tral st. . . . .	279	10"	Cem.	197.64
	285	12"	"	44.07
				241.71
Center st., I. O., Oak to Pine st.	463	12"	"	454.31
Chapel street, East. . . . .				
Chapel street, East. . . . .	400	10"	Clay	208.13
Chapin st., State st. to Marion street . . . . .	349	15"	"	746.99
	359	12"	"	
Chase ave., Fort Pleasant ave., easterly . . . . .	238	12"	"	24.49
	333	10"	"	
Charles st., Liberty st., northerly	654	12"	"	576.40
Liberty st., southerly . . . . .	29	12"	"	12.94
Charter avenue, Walnut street, easterly . . . . .	527	12"	"	589.34
Cherrellyn ave., Phoenix ave., southerly . . . . .	300	15"	"	475.20
Cherry lane, Mill river to Cen- tral street . . . . .	398	18"	"	410.62
	434	15"	"	
	251	12"	"	
	295	10"	"	
				1,454.15

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cherryvale avenue, Long Hill st. to Florentine gardens.	596	10"	Clay	\$15.74
Chester st., Hancock to Central street .....	330	8"	"	....
Chestnut st., Edwards street, southerly .....	575	12"	Cem.	\$579.02
Mattoon st., southerly .....	288	15"	"	319.69
Pearl to Mattoon st. ....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st. ....	143	1'-8"x2'-6"	"	599.51
Bridge to Worthington st. .	480	2'-0"	"	....
Worthington to Taylor st. .	60	18"	Cem. }	291.17
	244	12"	" }	
Lyman st. to B. & A. R. R. .	134	18"	" }	355.41
	72	12"	" }	
Franklin st., southerly .....	500	12"	"	358.75
Franklin st., northerly .....	397	12"	"	294.14
Essex to Everett st. ....	374	15"	"	586.72
Carew st., southerly .....	126	8"	Clay	100.68
Carew to Prospect st. ....	424	24"	" }	1,618.64
	537	20"	" }	
Ringgold st., northerly .....	220	12"	Cem.	178.88
Prospect st., northerly .....	313	18"	"	406.00
Bancroft st., southerly .....	299	12"	"	213.18
Bancroft to Montmorenci st. .	391	15"	"	535.24
Bancroft st. to Montmorenci st. (see Bancroft st.) .....	....	3'-2"x4'-9"	Brick	....
Montmorenci to Waverly st. .	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly .....	450	10"	"	385.61
Douglas to Springfield (see Springfield st.) .....	....	3'-6"	Brick	....
Merwin st., southerly .....	178	10"	Clay	....
Eagle st., northerly .....	87	15"	"	....
Eagle st., southerly .....	171	10"	"	....
Chestnut st., I. O., Worcester to Hampden st. ....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st. .	307	15"	"	342.65
Church st., Garden brook to North st. ....	556	18"	"	1,398.71
	80	15"	Cem.	157.23
Churchill st., Sumner ave. to Garfield st. ....	580	12"	Clay	84.12
	55	8"	"	6.89
Clarendon st., Worthington st., westerly .....	205	10"	"	225.80
Worthington to St. James ave. .	336	18"	Cem. }	1,855.39
St. James ave. to Sherman st. .	885	12"	" }	....
				2,081.19

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Clayton st., Phoenix avenue, southerly.....	398	15"	Clay	\$696.54
	253	12"	"	
Cleveland street, Armory to Liberty st.....	274	18"	"	790.48
	250	15"	"	
	276	12"	"	
	284	10"	"	
Clifford st., Bay st., northerly.	250	12"	"	319.95
	119	10"	"	
Clifton avenue, Central street, southerly.....	406	8"	"	82.10
Cliftwood ave., Sumner ave., southerly.....	464	10"	"	441.52
Clinton st.....	410	12"	Cem.	
submerged outlet.....	176	24"	Wood	2,207.90
	24	24"	C.Ir'n	
Conn. river to Fulton st....	593	4'-10" x 7'-3"	Brick	26,137.87
including Fulton st. from Clinton to Sargeant st....	1,080	4'-8" x 7'-0"	"	
	42	4'-10" x 7'-3"	"	
Sargeant st., Fulton to Carew street.....	920	4'-6" x 6'-9"	"	28,787.29
Carew st., Main st. to Garden brook.....	250	4'-6" x 6'-9"	"	
connection with Garden brook.....	32	5'-0"	"	
College ave., State st. to Shat- tuck ave.....	839	12"	Clay	139.62
Shattuck ave., northerly....	175	12"	"	139.62
College st., State st. to Wilbra- ham road.....	34	12"	"	349.92
	443	10"	"	
Collins st., Eastern avenue to Logan st.....	300	12"	"	457.04
	269	10"	"	
Colonial avenue, State street, southerly.....	326	12"	"	...
	348	10"	"	
Colton st., Wilbraham road to Beacon st.....	448	18"	"	1,892.82
	569	15"	"	
	658	12"	"	
Columbia terrace, Liberty st., north and east.....	498	10"	"	....
Columbus avenue, Forest Park ave., northerly....	307	10"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Commonwealth ave., Belmont ave. to Washington street...	441 500 549	24" 20" 18"	Clay " } " }	\$2,878.00
Congress st., Garden brook to Main st.....	151 221	15" 12"	Cem. } " }	\$528.44
Garden brook to Chestnut st.	133 198 369 288 119 76	20" 18" 15" 12" 15" 10"	Clay " } " } " } Cem. } " }	1,463.00 277.22
Continental ave., Sumner ave., southerly.....	215 202	12" 10"	Clay " }	2,268.66 27.45
Cook's ave., Worthington st. to N. Church ave. . .	117	15"	Cem. }	
N Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	" }	573.84
Cornell st., Dartmouth terrace to Wellesley st.....	185 374	15" 12"	Clay " }	543.05
Wellesley street., easterly..	186	10"	" }	208.20
Princeton st., westerly.....	52 86	10" 8"	Cem. Clay	47.30 88.04
Princeton st., easterly.....	181 120	10" 10"	Cem. Clay	100.72 149.53
Court st., Water st, easterly...	273	12"	Cem.	226.15
Court Square ave., westerly.	431	12"	"	553.45
Main st. to Court Square ave.	200	12"	"	309.67
				1,136.84
Cortland street, State street, northerly .....	164 621	15" 12"	Clay " }	672.01
Crosby st., Walnut st., westerly	321	10"	"	231.38
Cross st., Main to Willow st...	388	18"	"	878.12
Willow st., easterly . . . . .	363	12"	Cem.	311.56
				1,189.68
Crystal ave., Belmont avenue, easterly .....	251 250 298	15" 12" 10"	Clay " } " }	24.07
Cumberland st., Chestnut st., westerly .....	167	10"	"	125.29
Cypress street, Conn. river to Garden brook in Ferry st.	1,466	3'-4" x 5'-0"	Brick	13,629.35

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cypress avenue, Cypress street, northerly.....	360	12"	Clay	\$484.08
Dale st., northerly from sewer 60 ft. south of Hubbard ave	203	10"	"	\$157.30
Winthrop st., southerly....	46	8"	"	13.08
				170.38
Dartmouth st., St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick	8,247.06
Yale to Bowles st.....	295	2'-6"x3'-9"	"	
Dartmouth terrace, Worthing- ton st. to Cornell st....	499	20"	Clay	2,213.06
	357	18"	"	
	177	15"	"	
Dawes st., Bay st., southerly..	229	15"	"	165.40
	380	12"	"	
	518	10"	"	
Dawson avenue, White street, westerly.....	350	10"	"	95.87
Demond avenue, Fisk avenue westerly.....	510	12"	"	608.57
Plainfield st., easterly.....	403	12"	"	
Dexter st., Knox to Pine st....	558	12"	Cem.	60.83
	226	10"	Clay	245.10
				305.93
Dickinson st., Mill st. to Sum- ner ave.....	35	4'-6" cir.	Brick	44,552.11
	60	2'-1"x5'-0"	"	
	251	5'-0" cir.	"	
	679	4'-0" cir.	"	
	460	4'-10"x7'-3"	"	
	869	4'-8"x7'-0"	"	
	1,040	4'-4"x6'-6"	"	
	996	4'-2"x6'-3"	"	8,760.53
Sumner ave., southerly.....	1,379	2'-6"x3'-9"	"	
	324	2'-4"x3'-6"	"	
	434	2'-0"x3'-0"	"	
	312	1'-10"x2'-9"	"	
				53,312.64
Donald st., Birnie ave., easterly	315	10"	Clay	359.50
Dorchester st., St. James ave. to Amherst st.....	364	12"	"	
	238	10"	"	
Douglas st., B. & M. R. R. to North Main st. (see Row- land ave.).....	.....	.....	.....	.....
North Main to Chestnut st..	424	4'-6"	Brick	4,805.19
	442	4'-0"	"	
Dresden avenue, State street, southerly.....	359	12"	Clay	
	321	10"	"	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dwight st., Sanford to State st.	258	2'-8" x 4'-0"	Brick	\$1,571.86
Sanford to Harrison ave...	253	20"	Clay	1,441.27
	229	18"	"	
	199	15"	"	
Harrison ave., northerly....	100	15"	Cem.	144.41
Hillman st., southerly.....	226	10"	Clay	257.25
Hillman st., northerly.....	103	10"	"	388.28
Worthington st., southerly..	269	12"	"	433.91
Worthington st., northerly..	342	12"	Cem.	374.73
				<hr/> \$4,611.71
Dymon st., Walnut st., easterly.	415	12"	"	385.92
Eagle st., North Main to Chestnut st.....	643	15"	Clay	....
East Court st., Dwight street, westerly .....	206	12"	"	303.10
	62	10"	"	
Eastern ave., Watershop pond to Manhattan st .....	1,164	24"	"	2,164.43
Manhattan to Alden st. . .	338	20"	"	636.21
Alden to Collins st.....	231	12"	"	313.99
Greene st., southerly.....	125	8"	"	69.58
Greene to Ladd st .....	38	15"	"	27.25
Olive st., southerly .....	169	8"	"	119.57
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon st., northerly....	194	12"	"	331.17
King st. to Chapel st. . . .	152	10"	"	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly...	312	12"	Cem.	190.38
Tyler st., northerly.....	286	12"	"	181.30
Quincy st., northerly.....	118	10"	"	131.15
Monroe st., southerly.....	28	12"	"	45.09
	210	8"	Clay	179.00
Monroe st., northerly .....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
				<hr/> 5,038.44
Edwards st., Chestnut street, easterly .....	551	12"	Cem.	404.88
Elliott st., Salem st., southerly.	610	15"	"	730.48
	243	12"	"	309.08
				<hr/> 1,039.56
Elm st., submerged outlet.....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st.....	385	3'-9" cir.	Brick	10,744.19
Water st. to Main st.....	996	3'-8" x 5'-6"	"	
				<hr/> 12,804.78

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Elmwood st., Main to Hanover street .....	300	18"	Clay	\$707.66
	249	15"	"	
	50	12"	"	
Emery st., Boylston st., east and west .....	542	12"	Cem.	579.58
Essex street, Garden brook, westerly .....	418	15"	"	\$355.00
Garden brook to Chestnut st.	1,115	2'-2"x3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
Essex st., I. O., Oak to Myrtle street .....	254	12"	Clay	7,815.43
	145	10"	"	
	281	10"	"	
Everett st., Chestnut st. to brook brook to Cass st .....	323	15"	"	308.39
Cass st., easterly .....	926	15"	"	821.43
				104.35
				1,234.17
Euclid ave., Belmont ave. to Dickinson st. ....	389	12"	"	1,102.00
	741	10"	"	
	77	8"	"	
				50.67
				1,132.67
Fairbanks place, Worthington st., northerly .....	249	10"	"	220.66
Fairfield street, Litchfield to Garfield st. ....	376	12"	"	351.64
	556	10"	"	
Federal st., Worthington to Pearl st. ....	567	12"	Cem.	740.92
Summer st., southerly .....	274	10"	Clay	172.00
				912.92
Ferry st., Main to Garden brook (see Cypress st.) .....	....	....	....	....
Garden brook to Chestnut st.	1,168	2'-4"x3'-6"	Brick	5,377.81
Firglade ave., Sumner ave. to Spruceland st. ....	350	10"	Clay	46.01
	270	8"	"	
Spruceland to Pineywoods avenue .....	447	10"	"	46.01
		8"	"	
Fisk ave., Rowland to Worces- ter ave. ....	272	24"	"	1,073.11
	275	20"	"	
	298	10"	"	
Wason ave., southerly .....	299	24"	"	
	294	20"	"	4,073.11
	248	12"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Florence st., Pine st., easterly.	824	15"	Cem.	\$2,068.95
	651	12"	"	
Hancock st., easterly. ....	283	10"	"	
				303.15
				\$2,372.10
Florentine gardens, Piney- woods ave., northerly. ....	421	10"	Clay	22.83
Florida street, Worthington to Ingersoll grove st. ....	273	15"	"	359.06
	561	12"	"	523.88
Worthington to St. James ave.	935	2'-2" x 3'-3"	Brick	4,499.10
St. James ave. to Bay st. ....	599	24"	Clay	1,832.21
				7,214.25
Forest st., Belmont ave. to Forest Park ave. ....	419	12"	"	651.93
	255	10"	"	
Forest Park ave., Fort Plea-ant ave. to Garfield st. ....	1,081	24"	"	....
	325	20"	"	1,217.48
	562	18"	"	
Sumner ave., northerly. ....	567	12"	"	123.15
Sumner ave., southerly. ....	500	10"	"	....
Pineywoods ave., northerly.	380	10"	"	33.87
				1,374.50
Fort st., Main to Water st. ...	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave. ....	888	2'-4" x 3'-6"	Brick	13,339.80
	1,825	2'-0" x 3'-0"	"	
	428	12"	Clay	
				293.42
				13,633.22
Franklin street, Garden brook sewer to Main st. ....	434	18"	Cem.	....
Garden brook sewer to Chest- nut st. ....	469	18"	"	1,834.76
	735	15"	"	
	273	15"	Clay	
Chestnut to Charles st. ....	670	12"	"	303.37
Charles st., easterly. ....	621	12"	"	471.99
Cass st. to Webster st. ....	70	10"	"	684.32
	207	15"	"	
	107	15"	"	
Nursery st., westerly. ....	557	15"	Cem.	199.93
Nursery st. to Genesee st. ...				....
				3,494.37
Fremont st., Main to Water st.	780	....	Brick	702.45
Main st., westerly. ....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				1,424.25

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fulton st., Cypress to Clinton st.	882	12"	Cem.	\$826.66
Clinton st., northerly.....	829	15"	"	1,138.56
John st., northerly.....	314	12"	Clay	674.48
	401	10"	"	
Gardner ave., Gardner street northerly.....	151	8"	"	\$2,639.70 73.11
Gardner st., Hanover to Water street.....	655	2'-0" x 3'-0"	Brick	1,995.23
Water to Main st.....	400	12"	Cem.	518.97
Garden brook sewer (see pri- vate ways).				2,514.20
Garfield st., Forest Park ave., easterly.....	556	15"	Clay	967.16
	514	12"	"	
Belmont ave., westerly.....	531	10"	"	329.87
				1,297.03
George st., Dexter st., southerly	409	10"	"	332.45
Girard ave., Bay st. to Mc- Knight st.....	947	12"	"	711.13
Gordon st., Pasadena ave. to White st.....	618	15"	"	555.79
Grace st., Birnie ave., easterly.	274	15"	Cem.	51.56
Grand ave., Revere st., easterly	250	15"	Clay	.....
	252	12"	"	
Revere st., westerly.....	151	10"	"	.....
Grant st., Magazine to Armory street.....	588	12"	Cem.	439.38
Granville st., Eastern ave. to Logan st.....	495	12"	"	519.02
Gray's avenue, Cypress avenue, northerly.....	495	12"	"	421.06
Greene st., Hancock to East ern ave.....	610	18"	"	1,754.35
	793	15"	"	
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	133.60
*Greenwich st., Becket street, easterly.....	70	12"	"	316.31
	278	10"	"	
Greenwood st., Garden brook to Main st.....	386	12"	Cem.	2,231.69
Garden brook, easterly....	538	15"	Clay	
	113	12"	"	
	452	12"	Cem.	
Grenada terrace, Dickinson st. to Ventura ave.....	220	18"	Clay	708.45
	310	15"	"	
Grosvenor st., North to Chestnut street.....	131	18"	Cem.	
	648	15"	"	

\* Incomplete.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Grove st., North Main street, easterly .....	409	10"	Clay	\$442.65
North st., westerly .....	270	10"	"	
Grover street, Armory street to Liberty st. ....	300	18"	"	898.06
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dick- inson st. ....	500	12"	"	817.91
	474	10"	"	
Hampden st., Water street to Main st. ....	569	15"	Cem.	711.90
Hampden st., I. O., Chestnut st., westerly .....	459	12"	"	301.25
Hampshire st., I. O., Oak st., westerly ..	300	12"	Clay	\$633.59
	398	10"	"	
Oak st. to Myrtle st. ....	250	12"	Cem.	206.20
Myrtle st., westerly .....	300	10"	Clay	222.18
Hancock ave., Hancock street, westerly .....	520	10"	"	1,061.97
Hancock street, Mill river to Central st. ....	920	12"	"	531.80
Central to Walnut st. ....	218	18"	Cem.	1,759.06
	1,343	15"	"	
Walnut to Alden st. ....	122	12"	"	88.00
Lebanon to Alden st. ....	827	2'-0" x 3'-0"	Brick	5,009.61
Walnut (through Lebanon) to Quincy st. ....	1,852	3'-6" x 5'-3"	"	21,668.02
Quincy to State st. ....	913	3'-4" x 5'-0"	"	
Hanover st., York st. to Gard- ner st. ....	830	2'-2" x 3'-3"	"	29,390.99
Harriet st., North Main st. to North st. ....	250	15"	Clay	377.17
	207	12"	"	
North st., easterly .....	330	10"	"	172.92
Harrison ave., Main st. to Chestnut st. ....	600	15"	Cem.	550.09
	250	8"	Clay	203.61
Harvard st., Yale to St. James ave .....	316	18"	"	1,077.72
	300	15"	"	
	291	12"	Cem.	266.84
St. James ave. to Cornell st. .	736	12"	"	25.66
Hawley st., Wilbraham road to Monroe st. ....	181	12"	"	40.40
	330	10"	Clay	211.65
				252.05

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hawthorn st., Hancock street, westerly .....	441	12"	Cem	\$445.87
Hayden st., State st., northerly.	335	12"	Clay	24.11
	299	10"	"	
	222	8"	"	
Hebron st., North to Chestnut st.	663	12"	"	492.56
Hickory st., Mill river intercept- ing sewer to Alden st....	754	20"	"	2,388.46
	228	18"	"	
	184	15"	"	
	788	12"	"	
High street, Maple street to Ingraham ave.....	523	18"	"	\$1,958.92
	567	15"	"	
	550	12"	"	
Ingraham ave., easterly.....	846	12"	"	945.32
				2,904.24
Highland street, Allen street, southerly.....	625	18"	"	1,428.06
	304	15"	"	
	193	12"	"	
	404	10"	"	
Hillman st., Main to Dwight st.	350	15"	"	1,436.30
	380	12"	"	
Hillside place, Richelieu street, easterly .....	106	8"	"	....
Holyoke st., Main st., westerly.	734	12"	Cem.	928.06
Homer st., State st., southerly	31	12"	Clay	31.56
	370	10"	"	
Hooker street, North Main st. to North st. ....	444	10"	Cem.	39.04
	255	10"	Clay	....
				39.04
Howard st., Main st., westerly.	344	15"	"	799.34
	321	12"	"	
Water st., easterly.....	312	12"	Cem.	289.14
Water st., westerly.....	350	12"	"	364.47
				1,452.95
Hubbard avenue, Main street, easterly .....	257	15"	Clay	630.47
	321	12"	"	
Hunt terrace, Allen street, northerly .....	279	12"	"	....
Huntington st., Becket street, easterly .....	300	12"	"	....
	300	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Ingersoll grove, Worthington st., northerly.....	782	12"	Cem. }	\$1,003.05
	218	8"	Clay }	
Bowdoin st., easterly.	132	10"	" }	106.53
Irvington ave., Sumner ave., southerly .....	300	12"	" }	\$1,109.58
	100	10"	" }	
Jackson street, Sumner ave., southerly.....	460	10"	" }	56.78
	140	8"	" }	
Pineywoods ave., northerly.	281	10"	" }	....
				56.78
James st., Cedar st., northerly.	289	15"	Cem. }	924.38
	534	12"	" }	
Jefferson ave., North Main st. to Chestnut st. ....	414	12"	" }	492.50
See private ways also.	299	20"	Clay }	1,663.86
	299	18"	" }	
	276	15"	" }	
	60	12"	" }	
	78	6"	" }	37.89
John st., Fulton to Plainfield st.	652	12"	Cem.	2,194.25
Johnson st., Dickinson st. to Pasadena ave .....	1,964	18"	Clay	383.84
Keith st., Belmont ave. to Dickinson st.....	551	12"	" }	3,756.87
	551	10"	" }	
Kenwood Park, Belmont ave., northerly.....	130	12"	" }	1,018.18
	1,127	10"	" }	
Kibbe ave., Summer st. to Worthington st.....	260	18"	" }	139.96
King st., Walnut to Hancock st	504	15"	Cem. }	552.92
	441	12"	" }	
Hancock to Eastern ave....	710	18"	" }	921.37
	686	15"	" }	
Eastern ave. to Logan st....	405	12"	" }	1,808.75
	72	10"	Clay }	
				72.72
				2,802.84
Knox st., Mill river to Wind- sor st.....	1,115	15"	Cem. }	116.18
	198	12"	" }	
Ladd st., Eastern ave. to Logan st .. .. .	243	15"	Clay }	424.92
	304	12"	" }	
Lafayette st., St. James ave. to Amherst st .....	582	12"	" }	514.86
	21	10"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Laurel ave., Conn. river to Plainfield st .....	888 60	18" 18"	Cem. Clay	\$2,088.10 282.48
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	\$2,370.58 .....
Lebanon st. (see Hancock) ..	....	3'-6" x 3'-3"	Brick	....
Hancock st., westerly .....	158	2'-0" x 3'-0"	"	1,495.77
Hancock to Eastern ave ....	606 816	18" 15"	Cem. " }	1,701.28
Lenox street, Sumner avenue, southerly .....	465	10"	Clay	3,197.05 32.91
Lexington ave., Chestnut st. to Massasoit st. ....	668	12"	"	516.31
Leyfred terrace, Belmont ave., northerly .....	300 317	18" 15"	" " }	957.30
Liberty st., Garden brook to Main st .....	118 70	12" ....	" Brick	179.19
	172	12"	Cem.	1,036.34
Garden brook to Chestnut st.	967 171	15" 8"	" " }	
Chestnut to Webster st. ....	784	2'-4" x 3'-6"	Brick	
	659	1'-10" x 2'-9"	"	9,123.49
	684	2'-2" x 3'-3"	"	
Webster to Armory st. ....	366	3'-0" x 4'-6"	"	5,883.15
	1,282	2'-2" x 3'-3"	"	
	317	1'-10" x 2'-9"	"	2,539.81
	449	2'-2" x 3'-3"	"	
Armory to Grover st. ....	1,194 616	24" 18"	Clay " }	3,126.37
Lillian st., Oak st., easterly...	297	12"	"	21,388.35 232.47
Lincoln st., Magazine street to Federal st. ....	823	12"	"	676.54
Linden st., Chestnut to Cass st	470 862	18" 15"	Cem. " }	1,254.55
Litchfield st., Belmont ave. to Fairfield st. ....	159	15"	Clay	335.11
Garfield st., northerly .....	69	6"	"	7.10
				342.21
Locust st., York to Mill st. ....	84	3'-0" x 4'-6"	Brick	
	364	2'-9" x 4'-11"	"	6,804.18
	686	2'-6" x 3'-9"	"	
Logan st., Ladd st., northerly.	88	10"	Clay	67.64
Granville st., northerly .....	200	10"	"	147.48
Lombard st., Water st., easterly	500	12"	Cem.	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Long Hill st., submerged outlet.	26	18"	Clay	\$5,387.70
	290	18"	Wood	
	28	18"	C. I.	
Conn. river., easterly.....	1,310	24"	Clay	2,086.09
Long Hill st. and Washington avenue, from 24" pipe to Magnolia terrace.....	650	2'-4" x 3'-6"	Brick	6,969.65
	823	2'-2" x 3'-3"	"	
Long Hill st., Washington ave., northerly.....	399	15"	Clay	953.28
	185	12"	"	
	487	10"	"	
Sumner ave., southerly.....	356	8"	"	386.61
Warner pl. to Sumner ave..	423	10"	"	379.51
				<hr/> \$16,162.84
Loring st., Water st., easterly.	650	12"	Cem.	750.93
Lowell street, Conn. river to Plainfield st.....	305	18"	Clay	986.21
	396	15"	"	
	396	12"	"	
	283	10"	"	
Lyman st., Main to Chestnut st.	1,335	2'-0" x 3'-0"	Brick	6,113.12
Chestnut to Spring st....	720	15"	Cem.	1,655.26
Lyons st., I. O., Main street, northerly.....	261	18"	Clay	<hr/> 7,768.38
				352.96
Madison avenue, Central street, northerly.....	250	12"	"	737.57
	287	10"	"	
Magazine st., Worthington to Lincoln st.....	682	18"	Cem.	1,103.19
	249	15"	"	
Magnolia terrace, east side; Sum- ner ave. to Spruceland ave.	586	8"	Clay	95.64
Spruceland ave., southerly..	90	8"	"	
west side, Sumner ave. to Spruceland ave.....	622	8"	"	
overflow connection between east and west side.....	62	8"	"	26.00
Washington ave. to Spruce- land ave.....	362	24"	"	....
	602	12"	"	
Main st., including cost of parts in Carew and Franklin sts.	523	12"	Cem.	944.47
Sargeant st. to Emery st. ..	341	24"	Clay	2,539.81
	442	20"	"	
	480	18"	"	
	186	15"	"	
Locust st., southerly.....	800	15"	"	1,430.27

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Main st., York to B. & A. R.R.	56	7'-0", cir.	Brick	\$20,812.99
	1,772	6'-6", cir.	"	
	906	5'-6", cir.	"	
	990	5'-0", cir.	"	
	1,624	3'-4" x 5'-0"	"	34,453.56
	864	2'-4" x 3'-6"	"	
	263	12"	Clay	164.82
Main st., I. O., Chicopee river to Pine st. ....	2,321	2'-4" x 3'-6"	Brick	\$60,345.22
Pine to Cedar st. ....	500	18"	Cem.	7,636.81
	185	15"	"	870.78
	103	12"	Clay	128.49
Cedar to Lyons st. ....	1,110	2'-0" x 3'-0"	Brick	5,024.19
Lyons st., easterly. ....	205	24"	Clay	14,994.83
	245	18"	"	
	129	12"	"	
	542	15"	"	
Malden st., Allen st., southerly	291	12"	"	
	494	10"	"	
Manhattan st., Eastern ave. to Walnut st. ....	290	15"	"	826.79
	645	12"	"	
	205	10"	"	
Maple st., State to Temple st..	315	18"	"	675.51
				51.55
Park to High st. ....	225	18"	"	505.21
Union st., southerly. ....	515	18"	Cem.	959.13
	135	12"	"	
Central st., southerly. ....	33	18"	"	160.95
	338	12"	"	
Pine st., northerly. ....	195	15"	"	1,592.00
	850	12"	"	
Mapledell street, State street, northerly. ....	337	15"	Clay	3,944.35
	300	12"	"	70.80
	346	10"	"	
Maplewood ter., Fort Pleasant ave., easterly. ....	682	15"	"	22.21
	329	12"	"	
	178	10"	"	
Marble st., Main st., easterly..	222	18"	Cem.	1,178.97
	586	15"	"	
	242	12"	"	
Marengo Park, Belmont ave., easterly. ....	443	15"	Clay	
	612	12"	"	
	778	10"	"	
Margaret st., Water st., westerly	520	12"	Cem.	
Water st., easterly. ....	858	12"	"	



SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Marion st., Bay st., southerly..	833	12"	Clay	\$795.45
Chapin st., easterly.....	94	10"	"	25.89
	319	8"	"	
Market st., Harrison ave. to State st.....	147	....	Brick	1,066.36
	633	15"	Cem.	
	123	12"	"	
	119	10"	Clay	
Massachusetts ave., Wilbraham road, southerly.....	300	15"	"	953.68
	300	12"	"	
	227	10"	"	
Massasoit place, Massasoit st., easterly .....	381	12"	"	....
Massasoit street, Carew street, northerly .....	709	12"	Cem.	547.51
Lexington ave., southerly...	300	12"	Clay	258.56
	250	10"	"	
	233	10"	"	
Montmorenci st., southerly..	233	10"	"	168.93
Montmorenci st., northerly.	152	10"	"	92.94
				1,067.94
Mattoon street, Chestnut to Salem st.....	356	1' 4"x2' 0"	Brick	688.50
	87	15"	Cem.	
Maynard st., State st. to Shattuck ave.....	431	15"	Clay	607.82
	400	12"	"	
McKnight st., Catharine to Sherman st.....	255	15"	Cem.	421.42
	30	15"	Clay	56.78
Catharine to Bowles st....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles street to Girard ave.	119	12"	Cem.	81.85
	263	10"	Clay	233.51
Mechanic street, Water street, westerly.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
Medford street, Birnie avenue, easterly.....	280	12"	"	349.25
	234	10"	"	
Melrose st., Marshall place and Cottage ave.....	342	18"	"	1,345.66
	263	15"	"	
	74	12"	"	
	772	10"	"	
	592	8"	"	
Merrick avenue, King street, southerly .....	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut st.....	774	15"	Clay	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Mill river intercepting sewer, Mill river to Locust st....	370	5'-3"	Brick	\$6,066.64
	691	4'-0"	"	
Locust st. to Hickory st....	587	4' 0", cir.	"	42,706.00
	131	3' 6" x 5'-3"	"	
	1,743	5' 9", cir.	"	
	779	4' 3", cir.	"	
	1,611	3' 3", cir.	"	9,355.23
in Mill and Hickory sts ..	833	2'-2" x 3' 3"	"	
*Hickory st., easterly to R. R.	968	2'-2" x 3' 3"	"	20,573.14
R. R. easterly to Hickory st.	1441	2'-2" x 3' 3"	"	
				\$78,701.01
Mill st., Main st., easterly....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-6" x 3'-9"	Brick	4,764.79
				4,840.24
Monmouth st., Dorchester st., northerly and easterly....	199	12"	Clay	218.15
	171	10"	"	121.75
	64	12"	"	45.95
Yale st., westerly.....	278	10"	"	281.47
Berkeley st., northwesterly..	350	12"	"	235.62
				902.94
Monroe st., Hancock to East- ern ave .....	611	18"	Cem.	1,840.32
	789	15"	"	
	316	12"	"	
Eastern ave. to Colton st..				
Monson avenue, Greene street, northerly .....	200	8"	Clay	.....
Montmorenci st., Chestnut to Massasoit st.....	676	12"	"	790.32
Montrose st., State to Burr st..	338	15"	"	75.74
	217	12"	"	
	329	10"	"	
Morgan st., Garden brook to Main st .....	252	12"	Cem.	199.08
Garden brook to North st..	568	18"	"	1,092.71
	90	18"	Clay	233.10
				1,524.89
Morris st., Main st., easterly..	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
				3,301.90
Mountain View st., Forest Park ave., northerly.....	297	12"	Clay	.....
	297	10"	"	
Mulberry st., Maple st., easterly and northerly.....	687	15"	Cem.	1,246.18
	629	12"	"	
	246	10"	Clay	
west from Ridgewood ter- race .....	144	15"	"	233.59

\* Incomplete.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Murray Hill ave., Liberty st., northerly.....	107	10"	Clay	\$96.24
Myrtle st., Card Factory Pond brook, northerly.....	237	8"	" }	69.76
Myrtle st., I.O., Main to Worcester	377	24"	"	\$1,003.44
Berkshire st., southerly....	180	10"	"	189.63
Hampshire st., southerly....	126	10"	"	100.99
Nelson avenue, Greene street, northerly.....	90	12"	Cem.	27.96
Lebanon st., northerly.....	188	10"	"	126.54
Nelson street, Nursery street, easterly.....	308	24"	Clay	154.50
New st., E. Court st., northerly	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Newman st., Knox st., westerly	175	12"	Cem.	227.20
Norfolk st., Wilbraham road, southerly.....	300	15"	Clay }	11.49
	300	12"	" }	566.08
North st., Carew st., northerly.	190	8"	Cem.	84.88
Church to Grosvenor st....	68	18"	"	157.13
Morgan to Ringgold st....	198	18"	"	356.84
Osgood to Hebron st.....	130	18"	Clay }	426.85
	165	10"	" }	411.55
Bancroft st., southerly.....	302	18"	"	114.54
Bancroft st., northerly.....	153	12"	Cem.	177.12
Jefferson ave., northerly....	233	8"	Clay	48.13
Calhoun st., northerly.....	256	8"	"	302.86
Waverly to Grove st.....	362	12"	"	.....
Harriet st., southerly.....	86	8"	"	2,079.90
Northampton ave., Wilbraham road, southerly.....	1,101	12"	"	830.79
North Church ave., Cook's ave., easterly.....	209	10"	Cem. }	.....
Cook's avenue, westerly (for cost see Cook's ave.)....	133	10"	" }	.....
No. Main st, Morgan st, southerly	102	8"	Clay	41.98
Morgan st., northerly.....	173	8"	"	90.69
Arch to Osgood st.....	730	15"	Cem.	713.66
Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st....	359	24"	Clay }	2,568.01
	420	20"	" }	.....
	285	15"	" }	.....
Grove st., northerly.....	170	12"	"	226.45
Douglas to Harriet st.....	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st.....	250	24"	Clay	470.75
Douglas to Eagle st.....	326	2'-4"x3'-6"	Brick }	1,840.24
	272	1'-10"x2'-9"	" }	.....
Eagle st., northerly.....	142	24"	Clay	449.66
Wason ave., southerly.....	215	2'-0"x3'-0"	Brick	860.00
Wason ave., northerly.....	348	12"	Clay	281.41

10,391.47

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Norwood st., Main to Hanover st.	1,051	12"	Cem.	\$1,069.55
Nursery st., Liberty to Franklin st.	694	2'-8", cir.	Brick	\$2,284.52
Franklin st., northerly.....	587	2'-8", cir.	"	...
				2,284.52
Oak st., Union to State.....	717	18"	Cem.	880.48
Union to Tyler st.....	220	18"	Clay	752.00
	268	15"	"	
Walnut st. to Tyler st.....	158	18"	Cem.	280.65
				1,913.13
Oak st., I. O., north from Main	179	15"	"	
	171	12"	"	637.00
Main st., southerly .....	590	2'-2" x 3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
Hampshire st., southerly...	285	18"	"	
	300	15"	"	1,509.70
	400	12"	"	6,145.33
Oak Grove ave., State st., northerly	349	18"	"	
	327	15"	"	....
	158	12"	"	
	256	12"	"	....
Oakland st., Dickinson st. to Belmont ave. ....	895	24"	"	2,218.71
Dickinson to Orange st....	254	24"	"	
	350	18"	"	1,619.20
	170	12"	"	
	218	8"	"	110.79
				3,948.70
Olive st., Eastern ave. to Logan st.	540	10"	"	400.76
Orange st., Highland st., easterly	583	8"	"	
White st., westerly.....	381	12"	"	
	649	10"	"	961.35
White st., easterly.....	699	10"	"	
Orchard st., Plainfield street, westerly.....	325	20"	"	
	301	15"	"	
	297	12"	"	1,015.67
	140	10"	"	
Orleans court, Orleans street, westerly. ....	205	8"	"	....
Orleans st., Union st., northerly.	39	12"	Cem.	36.23
	310	12"	Clay	
	330	10"	"	456.19
Tyler st., northerly .....	188	10"	Cem.	187.74
Pendleton ave., northerly..	231	12"	"	327.73
Ormond st., Belmont to Sum- ner ave .....	275	10"	Clay	1,007.89
Osgood st., Garden brook to	257	12"	Cem.	252.85
Main st.....	588	18"	"	1,544.57
Garden brook to North st..	92	18"	Clay	174.87

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
to, Riverview terrace, northerly .....	63	12"	Clay	....
street, Grand avenue, northerly .....	456	10"	"	\$23.58
avenue, Locust street, northerly .....	351	18"	"	\$1,165.79
	337	15"	"	
	14	12"	Cem.	
				1,165.79
Main to Willow st...	353	18"	"	419.95
	42	18"	Clay	171.59
to Maple st. ....	200	24"	"	1,431.05
	557	18"	"	
				2,022.59
, I. O., Chicopee river main st. ....	32	24"	"	261.81
	221	12"	"	
to, southerly .....	1,098	24"	"	2,460.31
pond to B. & A. R. R.	1,227	12"	"	1,266.36
				3,988.48
st., Sumner avenue, northerly .....	419	10"	"	70.08
avenue, White street, northerly .....	156	12"	"	258.61
	291	10"	"	
et, I. O., Essex street, northerly .....	622	10"	"	537.36
	102	10"	"	47.49
				584.85
to, Garden brook to st. ....	214	10"	"	173.73
brook, easterly .....	352	18"	"	1,572.67
	349	15"	"	
	537	12"	"	
				1,746.40
lane, Willow street, northerly .....	216	10"	"	234.47
Chestnut to Spring st.	514	24"	"	1,792.62
	447	20"	"	
st., easterly .....	190	...	Brick	96.16
				1,888.78
ave., Walnut st. to cock st. ....	287	18"	Cem.	1,603.16
	524	15"	"	
	429	12"	"	
ck st. to Eastern ave.	600	18"	"	1,395.98
	793	15"	"	
				2,999.14

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Phoenix avenue, Liberty street, easterly.....	236	18"	Clay	\$4
	250	15"	"	
	89	10"	"	
Pine st., Mill to Cedar st. ....	740	2'-6"x3'-9"	Brick	\$13,659.54
	1,529	3'-6"x5'-3"	"	
	500	3'-10"x5'-9"	"	
Cedar to Walnut st.....	62	18"	Cem.	1,665.54
	884	15"	"	
	631	12"	"	
Pine st., I. O., Main st., easterly	1,896	24"	Clay	15,200
Pine st. court, Pine st., easterly.	348	10"	Cem.	
Pineywoods avenue, Washing- ton ave., northeasterly....	334	15"	Clay	
	263	12"	"	....
Magnolia terrace, westerly..	350	10"	"	....
Magnolia terrace to Jackson st	343	20"	"	....
	404	12"	"	....
Jackson st. to Forest Park ave.	341	12"	"	....
Plainfield st., Sargeant st. to Fulton st.....	414	18"	"	2,525.13
	537	15"	"	
	456	12"	"	
	244	10"	"	
Washburn st., southerly....	122	12"	"	129.78
Washburn to Orchard st. ..	331	2'-8"x4'-0"	Brick	1,555.00
Orchard to Newland st.....	303	2'-6"x3'-9"	"	2,367.93
Newland to Roseland st....	287	2'-4"x3'-6"	"	4,518.58
	294	2'-2"x3'-3"	"	
Rowland ave. to Talcott st..	288	24"	Clay	1,208.95
	299	20"	"	
Talcott ave., northerly.....	216	10"	"	158.46
Wason ave. to Demond ave.	304	24"	"	1,253.59
	249	20"	"	
	53	18"	"	
Pleasant st., Bay st., southerly.	296	12"	Cem.	13,377
Plymouth st., Fulton st., easterly	375	10"	Clay	20
Pomona ave., Summer avenue, northerly .....	580	12"	"	48
Portland st., Birnie ave., easterly	251	12"	"	2
	224	10"	"	
	396	15"	"	
Potter place, State st., northerly	301	12"	"	32
	274	10"	"	
	329	12"	Cem.	
Prince st., King to Lebanon st.	103	18"	"	289.08
Princeton st., Bay to Amherst st.	689	18"	Clay	724.15
	151	15"	"	177.72
Yale to Vassar st.....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	"	195.52

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Private ways:				
Armory Hill sewer from Armory st., through private grounds east of Armory st. to Worthington st.....	150 900 249	2'-5" x 3'-7½" 2'-8" x 4'-0" 2'-1" x 3'-1½"	Brick " } "	\$5,318.04
Card-factory Pond, Woodworth ave., westerly between High and State st. in front and around High school.....	751 492	12" 24"	Cem. Clay	\$408.75 848.26
High school to State st....	88	24"	"	192.35
Cemetery brook, Morris st., easterly, north of Central street.....	174	24"	"	1,449.36 569.59
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st.....	2,936 766 1,303 236	5'-6", cir. 5'-0", cir. 4'-6", cir. 3'-0" x 4'-6"	Brick " } " } "	47,577.34
Worthington st., northeasterly to Lyman st., thence via Railroad land to Armory st.....	3,274 952	4'-7½", cir. 4'-1", cir.	" } "	29,761.32
Jefferson ave., passage way in rear of lots on south side.	135 518	2'-0" x 3'-0" 12"	" Cem.	77,338.66 364.84
Private way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	402.70
Sewer in ave., Hampden st., southerly, near Water st.	111	12"	Cem.	147.14
Sewer Main st. to Dale st. between Hubbard avenue and William st.....	655	12"	"	441.92
Springfield st. and Glenwood, via Atwater Glen.....	677 598 389 1,292 40 16 1,294	3'-6", cir. 3'-3", cir. 4'-3", cir. 3'-0", cir. 2'-0", cir. 2'-10" x 4'-3" 24"	Brick " } " } " } " } " } Clay	14,614.89 3,889.98
Prospect st., Chestnut street, easterly.....	218 199 196	18" 15" 12"	" } " } "	18,504.87 623.53

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Pynchon st.....	950	2'-0" x 3'-0"	Brick	\$3,108.02
Queen st., Walnut to Hancock st.	634	12"	Cem.	594.68
Quincy st., Oak to Stebbins st.	860	12"	"	\$619.96
Hancock to Stebbins st....	522	12"	"	549.58
Hancock to Eastern ave....	637	18"	"	1,598.58
	765	15"	"	
Colton to Eastern ave.....	208	10"	Clay	156.87
				2,924.99
Randolph street, Maplewood terrace, easterly.....	250	12"	"	....
	251	10"	"	
Raymond ave., Carew street, northerly.....	277	10"	"	217.32
Reed st., State st., southerly..	219	12"	"	28.74
	309	10"	"	
Revere st., White st., southerly.	750	20"	"	23.32
	250	10"	"	
	209	8"	"	
Richelieu place, Richelieu st., easterly.....	100	8"	"	....
Richelieu street, Cooley lot, northerly.....	301	10"	"	....
Ridgewood place, Mulberry st., northerly.....	400	12"	"	29.46
Ringgold st., north to Chest- nut st.....	117	18"	Cem.	681.75
	632	12"	"	
Ripley ave., St. James avenue, southerly.....	230	10"	"	163.48
Riverview st., Riverview ter- race, northerly.....	63	10"	Clay	....
Riverview terrace, Fort Pleas- ant ave., easterly.....	298	15"	"	....
	322	12"	"	
	105	10"	"	
Roseland st., Plainfield street, westerly.....	350	18"	"	1,352.31
	350	15"	"	
	173	12"	"	
Rowland ave., Conn. river to North Main st., including 630' in Douglas st.....	579	5'-3", cir.	Brick	32,489.36
	51	1'-8" x 2'-6"	"	
	1,247	6'-6", cir.	"	
	1,330	6'-0", cir.	"	
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge avenue, Main street, easterly.....	574	24"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Salem st., Pearl st., south and east .....	283	18"	Cem. }	\$804.72
	99	15"	" }	
	290	12"	" }	
Sanford st .....	536	3'-2" x 4'-9"	Brick	4,014.47
School st., Union to Mulberry street .....	549	15"	Clay	\$620.95
Union st., northerly .....	262	10"	"	204.00
				824.95
Seventh st., Fulton to Main st. Sewer in avenue (see private ways).	830	12"	Cem.	661.03
Sewer (see private ways).				
Sheldon st., Becket to North Main st. ....	42	10"	Clay	43.87
Sharon st., Garden brook to Main st. ....	360	15"	Cem.	762.77
Garden brook, easterly .....	601	18"	" }	1,211.18
	463	12"	" }	
				1,973.95
Shattuck ave., Maynard ave. to Willard ave .....	200	10"	Clay }	....
	143	8"	" }	
	50	8"	" }	
Willard ave., easterly .....	175	12"	Cem. }	571.12
Sherman st., Bay to Clarendon st.	443	12"	" }	
Bay to McKnight st. ....	301	18"	Clay }	
State to McKnight st .....	301	15"	" }	1,314.14
	544	12"	" }	
				1,885.26
Silver st., Armory st., easterly.	302	15"	" }	470.93
	297	12"	" }	
Smith st., Knox to Dorne st..	200	12"	Cem.	27.26
Sorrento ave., Sumner avenue, northerly .....	82	6"	Clay	7.49
Spring st., south from Lyman st.	281	15"	Cem. }	2,460.42
	130	12"	" }	
Worthington to State st....	470	18"	" }	
	640	15"	" }	
	644	12"	" }	
Worthington st., northerly..	132	12"	Clay	87.28
Worthington to Summer st.	183	5'-0"	Brick }	1,498.24
	49	4'-3" x 6'-0"	" }	
				4,045.94
Spruce street, Central street, northerly .....	600	12"	Cem.	558.03

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Spruceland avenue, Magnolia terrace, westerly.....	67	8"	Clay	.....
Beechwood ave., easterly...	242	8"	"	\$136.48
Beechwood ave., westerly...	648	8"	"	.....
continued to Long Hill st...	93	8"	"	153.52
				529
Stafford street, Armory street, westerly .....	402	10"	"	28
State st., Water st., westerly..	152	12"	Cem.	45.27
	91	12"	"	71.19
Water st. to Main st. ....	907	18"	"	1,167.64
Main to Dwight st. ....	636	18"	"	1,433.50
Dwight to Oak st. ....	3,855	2'-cir.	Brick	5,770.83
	505	18"	Cem.	
Dwight st. to High school..	29	2'-8"x4'-0"	Brick	
	265	2'-2"x3'-3"	"	4,897.66
	417	2'-0"x3'-0"	"	
Repairing front of Benton park, .....	130	12"	Clay	212.78
Oak to Buckingham st. ....	2,110	18"	Cem.	2,590.63
Hancock to Sherman st. ....	1,147	3'-4"x5'-0"	Brick	13,555.85
Sherman to Chapin st. ....	492	3'-0"x4'-6"	"	
Chapin st. to Andrew st. ....	726	3'-0"x4'-6"	"	10,793.96
Andrew st. to Oak Grove ave. ....	937	2'-10"x4'-3"	"	
east from Oak Grove ave. to Courtland st. ....	548	2'-4"x3'-6"	"	5,042.79
	283	2'-2"x3'-3"	"	
	352	2'-0"x3'-0"	"	
Courtland st. to almshouse..	355	24"	Clay	1,897.59
	112	18"	"	
	1,547	12"	"	
Stearns avenue, Bridge street, northerly .....	172	12"	"	47.47
Stebbins street, Union street, northerly .....	506	12"	Cem.	6
Sterns terrace, Central street, northerly ..	393	12"	Clay	6
St. James avenue, Bay street to Ripley ave .....	681	12"	Cem.	521.28
Florida st. to Ripley ave...	469	12"	"	500.89
Florida st., northerly .....	417	18"	"	1,073.90
	300	12"	"	
Clarendon st. to Westminster street .....	248	15"	"	404.60
Clarendon st., northerly....	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'-0"x3'-0"	Brick	2,738.53
Harvard to Princeton st....	528	24"	Clay	1,587.44

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
St. James ave., Princeton st., northerly .....	308 249 57	18" 15" 12"	Clay " } "	\$965.55
Stockbridge street, Main street, easterly .....	777	18"	Cem.	
Sullivan street, Armory street, easterly .....	395	12"	Clay	
Summer st., Spring to Armory street.....	44 1,344 1,093 750	4'- 3"x6'-0" 4'- 2"x6' 3" 2'-10"x4' 3" 3'- 8"x5'-6"	Brick " } " } "	24,048.88
Sumner ave., Fort Pleasant ave. to Long Hill st.....	448 358	12" 10"	Clay } "	
Fort Pleasant ave. to Ran- dolph st.....	673	2'- 0"x3'-0"	Brick	
Randolph st. to Jackson st..	360	1'-10"x2'-9"	"	
Jackson st. to Hamilton st..	360	1'- 8"x2'-6"	"	7,968.46
Hamilton st. to Greenleaf st.	367	1'- 6"x2'-3"	"	
Greenleaf st. to Belmont ave.	355	20"	Clay	
	851	18"	"	2,915.88
	736	15"	"	
	272	12"	"	
	426	10"	"	
Belmont ave., easterly.....	100	8"	"	37.49
Dickinson st. to White st...	2,219	2'-8"x4'-0"	Brick	11,531.37
White st., easterly.....	565	2'-2"x3'-3"	"	2,391.46
Symonds ave., Worthington st. to Bridge st. (includes cost of Bond place).....	300	15"	Cem.	25,659.90
Talcott ave., Fisk ave. to Plainfield st.....	362 316	15" 12"	Clay } "	549.57
Taylor st., Main to Chestnut st.	650	15"	Cem.	
	341	12"	"	1,347.50
	248	12"	Clay	255.73
Temple st., Maple st., easterly, outlet into High school sewer	40 169	15" 15"	" "	34.79 171.71
Tenth street, Garden brook, easterly .....	300 302 421 4	18" 15" 12" 8"	" " " "	206.50 1,256.39
Terrence st., Union to State st.	374 313 48	12" 10" 10"	" " Cem.	565.26 34.02
				599.28

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Thomas st., Birnie ave., easterly	451	10"	Clay	\$338.41
Thompson st., Worthington st., southerly.....	603	12"	Cem.	\$638.27
St. James ave. to Bay st....	703	15"	"	749.22
State to Bay st.....	852	12"	"	653.12
Tracy avenue, Franklin street, southerly .....	14	10"	Clay	15.48
	262	10"	"	15.48
Tyler st., Oak to Hancock st..	717	15"	Cem. }	1,165.68
	663	12"	" }	
Hancock to Eastern ave...	601	18"	"	778.27
	795	15"	"	644.31
Eastern ave., easterly.....	251	10"	"	139.49
				2,727.75
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	2,024	3'-4" x 5'-0"	Brick }	27,384.14
	302	2'-6" x 3'-6"	" }	
	2,688	2'-0" x 3'-0"	" }	
	848	1'-8" x 2'-6"	" }	
Oak to Orleans st.....	404	15"	Cem.	467.96
Hancock to Stebbins st.....	261	2'-0" x 3'-0"	Brick }	2,307.33
	335	1'-10" x 2'-9"	" }	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave....	600	18"	Cem. }	1,413.45
	800	15"	" }	
Eastern ave., easterly.....	248	10"	Clay	152.56
Vassar street, Harvard street, northerly .....	550	12"	Cem.	34,458.84
				89.81
Ventura street, Sumner avenue, northerly .....	351	10"	Clay	289.51
Vernon st., Water st., easterly.	639	15"	Cem.	795.08
Main st., westerly .....	216	12"	"	310.68
				1,105.76
Vine st., Main to Fulton st...	697	12"	"	602.45
Vinton st., Liberty to Franklin st	357	12"	Clay	357.63
	262	10"	"	252.13
				609.76
Walden st., Dickinson street, easterly .....	166	8"	"	76.92
Walnut st., south from State st.	69	....	Brick	85.23
north from Charter ave ....	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'-0" x 3'-0"	Brick	4,956.57
Pine to Oak st.....	272	18"	Cem.	410.24
Ashley to Cedar st.....	784	15"	" }	1,
Ashley st., southerly.....	100	12"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut st., north from Manhattan st.....	249	10"	Clay	\$212.35
Florence st. northerly....	53	8"	Cem.	27.12
Hickory to Florence st.....	1,026	12"	Clay	992.67
				<hr/>
Walter st., Birnie ave., easterly.	285	12"	Cem.	\$9,471.30
Waltham avenue, Wilbraham road, southerly.....	546	12"	Clay	14.86
Wareham st., Grand avenue, southerly.....	419	10"	"	598.61
Warner place, Fort Pleasant ave. to Long Hill st.....	508	12"	"	21.24
	198	10"	"	
	89	10"	"	51.88
				<hr/>
Warriner ave., Locust street, easterly .....	448	12"	"	51.88
Washburn st., Conn. river to B & M R. R. ....	1,758	7'-0", cir.	Brick	399.54
Washington ave. (see Long Hill st.)				21,678.46
Wason ave., Conn. river to Plainfield st.....	451	3'-10"x5'-9"	"	
Plainfield st. to Fisk ave...	1,051	3'-4"x5'-0"	"	
Fisk ave. to Birnie ave....	634	3'-2"x4'-9"	"	
Birnie ave. to North Main st.	247	2'-0"x3'-0"	"	
Water st., Gardner to Loring st.	474	1'-10"x2'-9"	"	16,610.72
Loring st., northerly.....	345	12"	Cem.	1,182.58
Union to Margaret st.....	721	2'-0"x3'-0"	Brick	237.38
Union st., northerly.....	868	18"	Cem.	2,284.34
Elm to State st.....	275	18"	"	508.75
Elm to Pynchon st.....	43	2'-0"x3'-0"	Brick	198.00
	498	2'-6"x3'-6"	"	2,949.29
Pynchon st., northerly..	257	18"	Cem.	404.44
	329	15"	"	460.60
	61	12"	"	85.40
Worthington st., southerly..	225	12"	"	233.50
Worthington st. to R. R. row.	646	15"	"	904.40
				<hr/>
Waverly street, North Main to Chestnut st.....	473	20"	Clay	9,448.68
	487	10"	"	1,197.09
Webster st., Liberty to Franklin st.....	601	12"	"	395.54
Welcome place, Bay street, northerly.....	238	8"	"	....
Wellesley st., Cornell street, easterly .....	373	12"	Cem.	64.68

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellington avenue, Wilbraham road, southerly.....	287	15"	Clay	\$23.58
	244	12"	"	
	291	10"	"	
Wendell ave., Main st., easterly	458	15"	"	....
Westford avenue, Wilbraham road, southerly.....	300	15"	"	676.23
	300	12"	"	
	350	10"	"	
Westminster st., Bay to State st.	300	15"	"	\$705.11
	300	12"	"	
	201	10"	"	
St. James ave., southerly...	773	12"	Cem.	700.02
				1,405.13
White st., Allen to Orange st..	747	24"	Clay	1,717.86
	674	20"	"	1,490.97
	274	18"	"	
Orange st. to Dawson ave..	388	15"	"	389.27
	292	15"	"	275.73
Gordon st., southerly.....	500	12"	"	458.44
Whitney avenue, Water street, westerly.....	450	12"	Cem.	4,332.27
				257.32
Wilbraham avenue, Wilbraham road, southerly.....	1,125	12"	Clay	1,020.78
Alden st. to Beverly st.....	999	10"	"	1,121.36
	1,180	8"	"	
				2,142.14
Wilbraham road, State street, easterly.....	248	12"	Cem.	157.79
State st. to Northampton ave.	1,451	2'-0"x3'-0"	Brick	6,198.76
Northampton ave. to Bristol street.....	472	2'-6"x3'-9"	"	8,970.16
	476	2'-4"x3'-6"	"	
	478	2'-2"x3'-3"	"	
	473	2'-0"x3'-0"	"	
	254	1'-10"x2'-9"	"	
	256	1'-8"x2'-6"	"	859.35
Bristol st., easterly.....	263	20"	Clay	
	405	12"	"	
				16,186.06
Wilcox st., Water st., easterly.	548	15"	Cem.	891.89
	327	12"	"	
Water st., westerly.....	463	12"	"	205.76
				1,097.65
Willard avenue, State street, northerly.....	282	18"	Clay	785.26
	300	15"	"	
	241	12"	"	
Shattuck ave., southerly....	215	8"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
William st., Water to Dale st.	1,576	12"	Cem.	\$1,489.47
Water st., westerly.....	76	15"	" }	459.79
	425	12"	" }	
				\$1,949.26
Willow st., Cross to State st...	413	12"	Clay	791.42
Cross to Park st.....	265	12"	"	378.17
Union to Park st.....	216	18"	Cem.	325.32
Union st., southerly.....	220	15"	"	302.23
				1,797.14
Wilmington st., Dickinson st. to				
Revere st.....	349	18"	Clay }	
	450	15"	" }	1,557.40
	386	12"	" }	
Winchester st.....	424	12"	"	357.96
Windsor st., Knox st., westerly.	80	15"	Cem. }	....
	485	10"	" }	
Winthrop st., Main st., easterly.	52	18"	" }	220.81
	141	15"	" }	
Main st., easterly.....	520	....	Stone	....
Wolcott street, Armory street,				
westerly .....	220	10"	Clay	....
Woodside ave., Belmont ave.,				
northerly.....	451	10"	"	321.97
Worcester ave., Plainfield to				
Birnie ave.....	1,486	15"	Cem.	53.14
Worcester st., I. O., Myrtle to				
Chestnut st.....	4	24"	Clay }	
	290	20"	" }	945.80
	382	2'-0" x 3'-0"	Brick	1,283.00
Oak st., easterly.....	275	12"	Clay }	
	212	10"	" }	519.07
Pine st., easterly.....	546	20"	"	768.42
				3,516.29
Worthington st., submerged				
outlet .....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
Conn. river to Main st....	1,038	5'-7" x 7'-0"	Brick }	
Main to Dwight st.....	821	5'-4" x 7'-0"	" }	33,410.12
Dwight to Garden brook ..	566	4'-0" x 6'-0"	" }	
Garden brook to Spring st..	738	4'-3"	" }	
Spring st., branch north....	35	5'-0"	" }	4,361.35
Spring st., branch south....	47	2'-0" x 3'-0"	" }	

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington st., Spring street, easterly .....	40	18"	Cem.	\$614.35
	242	15"	"	
	251	12"	"	
Autumn st., westerly .....	113	12"	"	118.78
near Sacketts ave. ....	145	10"	"	111.47
West brook, easterly .....	329	15"	Clay	1,110.54
	217	12"	"	
	231	15"	"	
West brook to Autumn st..	98	12"	"	727.56
Sacketts ave., westerly .....	337	12"	"	207.28
Sacketts ave. to Kibbe ave..	794	15"	Cem.	335.57
Kibbe ave. to Federal st....	158	18"	Clay	826.90
head of Magazine st. ....	248	2'-8" x 4'-0"	"	375.10
near Magazine to Bowdoin st.	354	2'-1" x 3'-11"	Brick	20,646.21
	359	3'-4" x 7'-2"	"	
	1,307	3'-4" x 6'-9"	"	
Bowdoin st. to St. James ave.				\$64,904.32
Yale st., Dartmouth to Prince- ton st. ....	350	24"	Clay	1,770.13
	359	18"	"	
	233	15"	"	
Princeton st., northerly ....	712	12"	"	452.46
York st. ....	1,203	7'-0", cir.	Brick	2,222.59
				13,912.27
Total .....	542 284			\$1,292,154.27

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.



## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
shaped.....	1,038	5'- 7"x7'- 0"	Brick and cem. mortar.
".....	821	5'- 4"x7'- 0"	" " "
".....	1,095	4'-10"x7'- 3"	" " "
".....	1,949	4'- 8"x7'- 0"	" " "
".....	1,170	4'- 6"x6'- 9"	" " "
".....	1,040	4'- 4"x6'- 6"	" " "
".....	2,340	4'- 2"x6'- 3"	" " "
".....	1,746	3'- 8"x5'- 6"	" " "
".....	830	3'- 4"x5'- 0"	" " "
".....	536	3'- 2"x4'- 9"	" " "
".....	819	3'- 0"x4'- 6"	" " "
".....	1,093	2'-10"x4'- 3"	" " "
".....	2,506	2'- 8"x4'- 0"	" " "
".....	450	2'- 2"x3'- 3"	" " "
".....	417	2'- 0"x3'- 0"	" " "
ed.....	566	4'- 0"x6'- 0"	" " "
".....	1,131	3'-10"x5'- 9"	" " "
".....	1,074	3'- 8"x5'- 6"	" " "
".....	3,512	3'- 6"x5'- 3"	" " "
".....	359	3'- 4"x7'- 2"	" " "
".....	1,307	3'- 4"x6'- 9"	" " "
".....	9,586	3'- 4"x5'- 0"	" " "
".....	1,056	3'- 2"x4'- 9"	" " "
".....	2,877	3'- 0"x4'- 6"	" " "
".....	953	2'-10"x4'- 3"	" " "
".....	364	2'- 9"x4'- 11"	" " "
".....	2,516	2'- 8"x4'- 0"	" " "
".....	4,818	2'- 6"x3'- 9"	" " "
".....	800	2'- 6"x3'- 6"	" " "
".....	150	2'- 5"x3'- 7 1/2"	" " "
".....	8,636	2'- 4"x3'- 6"	" " "
".....	11,930	2'- 2"x3'- 3"	" " "
".....	603	2'- 1"x3'- 11"	" " "
".....	21,973	2'- 0"x3'- 0"	" " "
".....	4,251	1'-10"x2'- 9"	" " "
".....	3,980	1'- 8"x2'- 6"	" " "
".....	917	1'- 6"x2'- 3"	" " "
".....	669	1'- 4"x2'- 0"	" " "
".....	3,017	7'-0"	" " "
".....	3,019	6'-6"	" " "
".....	1,330	6'-0"	" " "
".....	1,743	5'-9"	" " "
".....	3,842	5'-6"	" " "
".....	949	5'-3"	" " "
".....	2,257	5'-0"	" " "
".....	3,274	4'-7 1/2"	" " "
".....	1,762	4'-6"	" " "
".....	3,362	4'-3"	" " "
".....	952	4'-1"	" " "

Sewers.

# BY SIZES.—CONCLUDED.

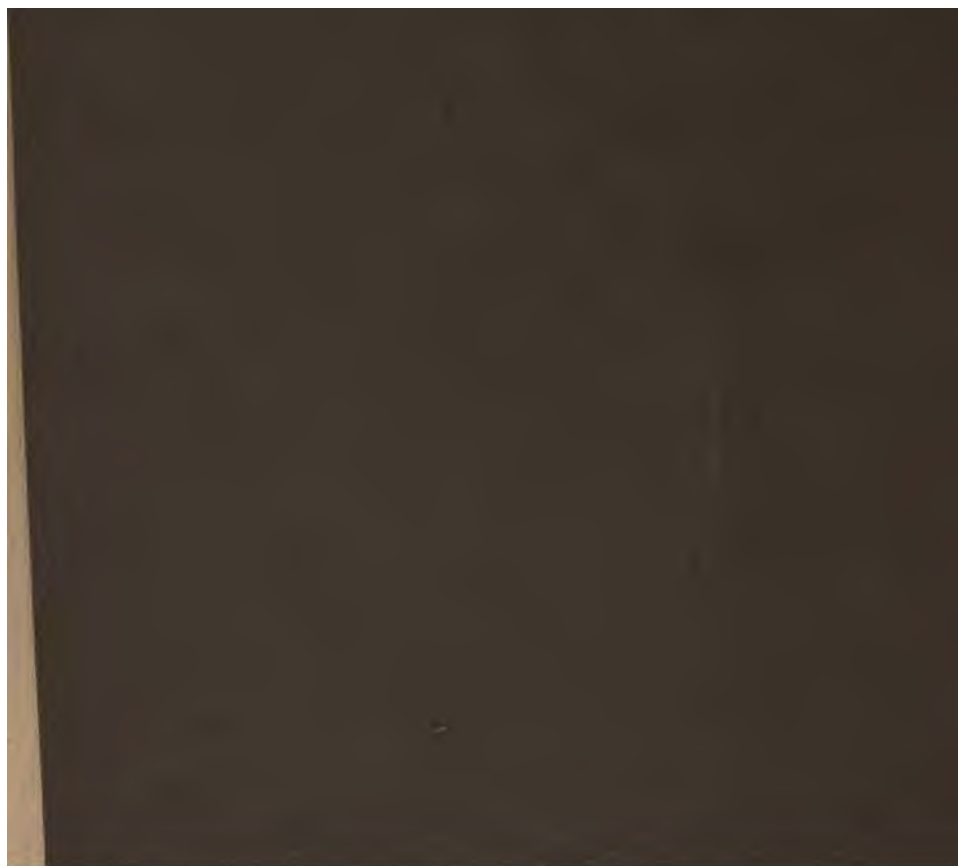
Size.	Material.
99 4'-0"	Brick and cem. mortar.
85 3'-9"	" "
677 3'-6"	" "
209 3'-3"	" "
549 3'-0"	" "
2,072 2'-8"	Clay pi
4,375 2'-0"	" "
23,771 24"	" "
15,736 20"	" "
25,459 18"	" "
39,560 15"	" "
80,510 12"	" "
60,193 10"	" "
14,344 8"	Cement
369 6"	" "
24,673 18"	" "
41,040 15"	" "
64,860 12"	" "
4,913 10"	Cast-iron pipe.
822 8"	" "
120 24"	Wood pipe.
28 18"	" "
726 24"	Brick and cem. mortar.
290 18"	Concrete.
93 6'-0"x4'-3"	Stone, brick, and mortar.
60 5'-0"x2'-1"	" "
2,666	
542,284	

allows:—

Brick and cement mortar,  
 Miscellaneous materials,  
 Clay pipe,  
 Lining.

Feet.  
 142,144  
 3,700  
 259,500  
 136,000

Miles.  
 26.92  
 .74  
 .03



Annual Report  
**Superintendent of  
Streets and Sewers**

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Springfield, Massachusetts

COMPLIMENTS OF

ARTHUR A. ADAMS,



Superintendent of Streets and Sewers.

For the Year 1905

136

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Annual Report  
**Superintendent of  
Streets and Sewers**

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Springfield, Massachusetts



**For the Year 1905**

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ASTOR, LENOX AND  
TILDEN FOUNDATIONS  
1906

# THIRTY-SEVENTH ANNUAL REPORT

## OF THE

# STREET DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1905.

*the City Council:—*

In accordance with the requirements of Chapter 19, Section of the Revised Ordinances, I have the honor of presenting ements of receipts and expenditures of the Street Department, and descriptions of work done during the fiscal year ing December 10, 1905.

## FINANCES IN GENERAL.

### RECEIPTS.

hways and Bridges, . . . .	\$193,264 43	
lks and Curbing, . . . .	22,104 41	
tering Streets, . . . .	30,518 36	
	<hr/>	\$245,887 20

### EXPENDITURES.

hways and Bridges, . . . .	\$192,584 16	
lks and Curbing, . . . .	22,045 61	
tering Streets, . . . .	30,025 33	
	<hr/>	\$244,655 10

### UNEXPENDED BALANCES.

hways and Bridges, . . . .	\$680 27	
lks and Curbing, . . . .	58 80	
tering Streets, . . . .	493 03	
	<hr/>	\$1,232 10

**WORK IN GENERAL.**

Streets, . . .	{	Graveling, . . . . .	4,195 feet
		Macadamizing, . . . . .	15,150 feet
		Macadam and gravel resurfacing, . . . . .	15,961 feet
		Granite block paving, . . . . .	216 feet
		Bitulithic paving, . . . . .	4,724 feet
Street cleaning, . . .	{	Gravel, . . . . .	47.69 miles
		Macadam, . . . . .	52.7 miles
		Paving, . . . . .	7.97 miles
Sidewalks, . . .	{	Brick (new), . . . . .	1,644 feet
		Brick (relaid), . . . . .	5,765 feet
		Tar concrete (new), . . . . .	1,103 feet
		Tar concrete (resurfaced), . . . . .	1,257 feet
		Cinder, . . . . .	2,810 feet
Curbing, . . .	{	Set, . . . . .	16,281 feet
		Reset, . . . . .	13,672 feet
Crosswalks—new, . . . . .			41
Streets watered, . . . . .			83.17 miles



# FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

### RECEIPTS.

By regular appropriation, . . . . .	\$151,000 00	
From Springfield Street Railway Company,		
Corporation Tax, . . . . .	16,068 21	
Excise Tax, . . . . .	11,353 26	
From departments and private parties, bills rendered, . . . . .	14,842 96	
		<b>\$193,264 43</b>

### EXPENDITURES.

Automobile, repairs and supplies, . . . . .	\$606 53	
Bridges, repairs and care, . . . . .	2,453 82	
City teams, uncredited balance, . . . . .	64 10	
City yard, Logan street, . . . . .	259 73	
City yard, Lyman street, . . . . .	2,374 44	
Engineering, . . . . .	377 46	
Work and material charged to departments, . . . . .	5,045 48	
Work and material charged to private parties, . . . . .	5,357 18	
Land damages, account street re-locations, . . . . .	100 53	
Materials on hand, . . . . .	175 39	
Office and general expenses, . . . . .	2,211 20	
Salary of superintendent, . . . . .	2,300 04	
Salary of second assistant superintendent—part, . . . . .	773 18	
Steam roller house repairs and roller equipment, . . . . .	785 46	
Street construction, {		
Graveling, . . . . .	3,316 55	
Macadamizing, . . . . .	26,247 54	
Paving, . . . . .	38,377 30	
Street maintenance, {		
Cleaning, . . . . .	34,975 56	
Cleaning equipment, . . . . .	859 49	
General repairs, . . . . .	20,859 62	
Gravel resurfacing, . . . . .	4,046 58	
Macadam resurfacing, . . . . .	8,427 72	
Winter expenses, . . . . .	28,250 77	
Tools and supplies, . . . . .	1,838 49	
	<b>\$190,084 16</b>	
Transferred to Walks and Curbing, . . . . .	2,500 00	
	<b>\$192,584 16</b>	
Unexpended balance, . . . . .	680 27	
		<b>\$193,264 43</b>

*Report on Streets.***BILLS RECEIVABLE.**

*Bills unpaid Dec. 10, 1904,	\$17,436 79	
Bills committed during the year 1905,	15,061 07	\$32,497 86
Bills paid during the year 1905,	\$14,842 96	
Abatements and corrections,	41 71	14,884 67
Bills unpaid December 10, 1905,		\$17,613 19

\*Includes \$15,869.03 charged Springfield Street Railway Company for removal of snow, 1898 to 1902 inclusive.

**WALKS AND CURBING.****RECEIPTS.**

By regular appropriation, . . . .	\$9,000 00	
Transferred from Highways and Bridges, .	2,500 00	
From abutters for walks laid previous to 1905,	6,106 47	
From abutters for walks laid during 1905,	4,497 94	\$22,104 41

**EXPENDITURES.**

Office and general expenses, . . . .	\$249 25	
Salary of second assistant superintendent—part,	426 98	
Engineering, . . . . .	740 21	
Setting and resetting curbing, . . . .	6,400 47	
Work and material not chargeable, . . .	1,321 47	
Crosswalks, new and relaid, . . . .	3,031 04	
Tools, . . . . .	98 20	
Work and material charged to abutters, .	9,624 82	
Work and material charged to departments, .	542 66	
	\$22,435 10	

**Credit by**

City teams, . . . . .	\$154 65	
Material from inventory, . . . . .	234 84	389 49
		\$22,045 61
Unexpended balance, . . . . .	58 80	

# *Report on Streets.*

7

## BILLS RECEIVABLE.

Bills unpaid, December 10, 1904, . . .	\$8,093 88	
Bills committed during the year 1905, . . .	8,257 25	\$16,351 13
	<hr/>	
Bills collected during the year 1905, . . .	\$10,604 41	
Abatements and corrections, . . .	113 13	
	<hr/>	10,717 54
		<hr/>
Bills unpaid, December 10, 1905, . . .		\$5,633 59

## WATERING STREETS.

### RECEIPTS.

By appropriation, . . . . .	\$8,000 00	
By watering street assessments, . . . . .	19,395 12	
From Springfield Street Railway Company, by agreement, . . . . .	2,173 60	
By bills rendered, . . . . .	49 64	
By transfer from Sewers and Drains, . . . . .	1,000 00	\$30,518 36
	<hr/>	

### EXPENDITURES.

Equipment—three new carts, . . . . .	\$1,020 00	
General expenses, . . . . .	380 80	
Standpipes and car hydrants—construction, maintenance, opening and closing, . . . . .	1,304 12	
Standpipe bases—construction and maintenance, . . . . .	184 81	
Watering carts—repairs and storage, . . . . .	761 28	
For use of teams as per pay rolls, . . . . .	1,035 01	
For use of teams as per contracts, . . . . .	14,468 23	
American Car Sprinkler Company, as per contracts, . . . . .	9,801 49	
Inspector, . . . . .	849 15	
Inspector's horse and carriage, . . . . .	220 44	
	<hr/>	
	\$30,025 33	
Unexpended balance, . . . . .	493 03	\$30,518 36
	<hr/>	

## WORK ITEMIZED.

### BRIDGES.

#### REPAIRS AND CARE.

	Description of work.	Cost.
Armory street, over N. Y., N. H. & H. Railroad,	Floor and sidewalk repairs,	\$28 30
Armory street, over Boston & Albany Railroad,	Partial floor replanking and sidewalk repairs,	149 89
Berkshire street, Red House crossing,	Floor repairs,	22 44
*Ludlow,	Replanking floor and paint- ing of iron structure,	704 92
Main street, I. O.,	Floor repairs,	5 20
North end,	Floor and sidewalk repairs and care,	165 41
Old toll,	Shingling southerly half of roof, floor repairs and care,	1,000 82
Pasco street,	Floor repairs,	3 75
Plainfield street,	Partial floor replanking, sidewalk repairs, paint- ing iron structure and care,	335 70
South end,	Care,	34 14
Sundry bridges,	Care,	3 25
		<hr/> \$2,453 82

\* Partial payment of cost of painting.

**STREET CONSTRUCTION.  
GRADING AND GRAVELING.**

Street.	Limits.	Length in feet.	Area in sq. yds.	Total cost.
Allen street, Hickory street, Wilmont street, Worcester st. I. O.,	N. E. Railroad to Plumtree road, Alden street, 820 feet southerly, Dickinson street, 571 feet easterly, Lyons street, 1,120 feet westerly,	1,684 820 571 1,120	4,678 2,733 2,539 4,480	\$1,772 32 339 36 171 92 1,082 95
		4,195	14,430	\$3,316 55

**MACADAM.**

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Amherst street, Armory street, Bay street,	Harvard to Monmouth, Worthington, 1,512 feet northerly, Highland division, N. Y., N. H. & H. Rail- road, to Cambridge street,	1,233 1,512 416	4,069 4,448 1,387	\$0.49 + .55 .46 +	\$2,020 77 2,446 69 638 29
Belmont avenue, †Clark street, Grace street, Grant street,	Southerly side, Garfield street to Sumner ave.	1,624 619 354 577	4,170 1,100 885 1,603	.63 + .58 + *.98 .40	2,648 87 641 31 867 67 648 87

STREET CONSTRUCTION.  
MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
† Hickory street, Kibbe avenue,	Eastern avenue, 955 feet easterly,	955	2,123	\$0.39+	\$839 07
Main street, I. O.,	Oak to Front street,	213	710	.38+	270 06
Oakland street,	Dickinson to Orange street,	1,000	3,955	.07+	2,685 46
Plainfield street,	Washburn to Newland and Demond avenue to Wason avenue,	979	3,322	.75+	2,498 34
Summer street,	Federal to Armory,	1,287	3,205	*1.32+	4,241 44
† Wight place,		378	1,260	.31+	391 76
Wilbraham road,	Southerly side, Homer to Benton st.,	388	692	.60	420 00
† Wilcox street,	Water street westerly,	2,600	5,142	.84+	3,300 79
Yale street,	Princeton to Monmouth street,	385	984	.61+	606 82
		630	2,256	.47+	1,080 13
		15,150	41,311		\$26,247 54

\* Includes cost of cinder foundation.

† Old material used in part.

PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	\$1.71	\$2,982 42
Chestnut street,	Allendale to Jefferson avenue,	Bitulithic,	825	2,898	2.09 +	6,087 21
*Cypress street,	Boylston to Fulton,	Gran. blks.	216	848	.88	744 43
Hampden street,	Completion, Main to Water,	Bitulithic,	394	1,539	1.94 +	2,993 05
Maple street,	State to High,	Bitulithic,	593	2,530	2.07	5,234 75
State street,	Sherman to Highland Div. N.					
	Y., N. H. & H. R. R.,	Bitulithic,	820	4,352	2.17	9,435 00
Walnut street,	Pendleton ave. to Lebanon st.,	Bitulithic,	1,195	3,888	2.16 +	8,412 84
Worthington street,	Main to Cook's avenue,	Bitulithic,	404	1,418	1.77	2,507 60
			4,940	19,219		\$38,877 30

Note. Bitulithic paving consists of 5" trap rock foundation and 2" wearing surface after rolling. Two rows of block paving are laid outside and one row inside of each rail of car tracks, on Portland cement concrete foundation mixed in proportions, one cement, three sand and six rock.

\* Granite blocks laid on sand foundation. Old blocks were used, cost of which is not included.

## STREET CONSTRUCTION.

## MACADAM REPLACED BY PAVING.

Street.	Limits.	Length in feet.	Area in sq. yds.
Bridge street,	Main street, 493 feet westerly,	493	1,746
Chestnut street,	Allendale to Jefferson avenue,	825	2,164
Cypress street,	Boylston to Fulton,	216	848
Hamden street,	Completion, Main to Water,	394	1,598
Maple street,	State to High,	598	2,580
State street,	Sherman to Highland Division, N. Y., N. H. & H. R. R.,	820	4,352
Walnut street,	Pendleton avenue to Lebanon street,	1,195	3,444
Worthington street,	Main to Cook's avenue,	404	1,418
		4,940	18,041

## MACADAM BUILT BY PRIVATE PARTIES.

Street.	Limits.	Built by	Length in feet.	Area in sq. yds.
*Central street, Greenwich street, *Main street I. O., Portland street,	Pine to Hancock, North Main to Becket, Oak to Front, North Main to Birnie avenue,	Springfield Street R. R. Co., W. H. Dexter, Springfield Street R. R. Co., W. H. Dexter,	643 610	1,692 2,143 1,148 2,033
			1,253	7,016

\* Length heretofore included in table of macadamized streets.



Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Armory street, Liberty street,	Van Horn Reservoir to Springfield street, Carew street to Chicopee line,	2,068	5,170	\$0.27 +	\$1,402 95
		5,800	14,576	.18 +	2,643 63
		7,868	19,746		\$4,046 58

## MACADAM RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Central street, City Hall place, State street, State street, Stockbridge street,	Pine to Mill, Pyncheon street to Court, City Library to Walnut street, Northerly side, Oak to Sherman, Main to Willow,	2,443	5,873	\$0.38 +	\$2,247 14
		277	585	.33	192 47
		2,740	16,716	.20	3,316 44
		2,520	17,127	.14 +	2,450 28
		313	777	.29	221 39
		8,293	41,078		\$8,427 72

## GENERAL REPAIRS.

Street.	Gravel.	Macadam.	Sewer Inlets.	Miscel- laneous.	Total cost.
Acushnet ave.,		\$6 82	\$14 77		\$21 59
Alden street,		39 48		\$3 12	42 60
Allen street,	\$742 56	5 31	11 17	51 35	810 39
Armory street,	41 87	7 29		16 21	65 37
Bay street,	30 67	209 87	19 62		260 16
Bay road,	48 88				48 88
Belmont ave.,	128 31	53 57	91 99	5 75	279 62
Berkshire street, I. O.,	553 38			96 90	650 28
Burcham Bend road,	32 37			214 87	247 24
Birnie avenue,	7 05		25 42		32 47
Bliss street,		5 48	13 88	6 25	25 61
Bond street,		11 98	18 89		30 87
Boston road,	582 18	27 88		73 19	683 25
Bowdoin street,	6 18	13 08	4 48		23 74
Boylston street,		3 36	33 12		36 48
Bridge street,		100 19	156 95	6 13	263 27
Calhoun street,		20 83			20 83
Carew street,	448 87	38 56	34 44	10 27	532 14
Cedar street,		24 00	41		24 41
Central street,		158 33	6 73	14 02	179 08
Chase avenue,	90	12 50	7 17		20 57
Chestnut street,		119 66	21 98	22 03	163 67
Chestnut street, I. O.,	32 93		8 92		41 85
Clinton street,		4 05	25 12	44	29 61
Commonwealth avenue,	201 91				201 91
Congress street,		11 90	23 45		35 35
Cooley street,	242 13			4 32	246 45
Cottage street, I. O.,	15 25			21 85	37 10
Court street,		14 47		8 60	23 07
Dawes street,	24 44				24 44
Dickinson st.,	111 47		59 33		

GENERAL REPAIRS—CONTINUED.

Street.	Gravel.	Macadam.	Sewer Inlets.	Miscellaneous.	Total cost.
Douglas street,		\$40 23	\$2 95		\$43 18
Dwight street,			7 02	\$19 55	26 57
Eastern avenue,		32 87	81		33 68
Emery street,		9 32	33 61		42 93
Essex street,	\$13 71	6 96	43 33		64 00
Euclid avenue,	1 71		42 58		44 29
Ferry street, *		25 94	53 98	13 52	93 44
Florence street,		31 30			31 30
Forest street,	28 88				28 88
Forest Park ave.,	20 33	28 50	34 19		83 02
Fort Pleasant avenue,	65 03	102 94	1 68		169 65
Franklin street,		25 83	25 65	5 87	57 35
Fulton street,		87 09	17 63		104 72
Gardner street,			32 15		32 15
Girard avenue,	20 25				20 25
Granville st.,	28 36				28 36
Greenwich st.,			83 16		83 16
Hancock street,		25 16		4 18	29 34
Hampden st.,		16 28	17 62		33 90
Hampden street, I. O.,	66 21		17 03	7 19	90 43
Hickory street,		32 76	8 72	43 72	85 20
High street,		13 61	3 13	23 88	40 62
Highland st.,	30 37	6 85			37 22
Holly st., I. O.,			81 37		81 37
Homer street,	44 88		20 46		65 34
Ingersoll Grove,	4 67		17 64		22 31
King street,	1 69	35 13	81		37 63
Ladd street,	13 90		18 78		32 68
Lexington ave.,				110 94	110 94
Liberty street,		95 62	38 42	24 28	158 32
Linden street,		21 01		3 48	24 49
Locust street,		104 13	9 76		113 89
Long Hill st.,	46 94	6 30		108 73	161 97
Lyman street,		24 79	9 75	9 29	43 83

## GENERAL REPAIRS—CONTINUED.

Street.	Gravel.	Macadam.	Sewer Inlets.	Miscel- laneous.	Total cost.
Main street,		\$8 52	\$18 14	\$353 95	\$380 61
Main st., I. O.,	\$161 02	46 05	69 13	60 90	337 10
Maple street,		35 88	41		36 29
Marion street,	27 95				27 95
Market street,		26 37	6 16		32 53
Medford street,			50 42		50 42
Mill street,		86 51		1 54*	88 05
Monroe street,	13 90		19 13		33 03
Mulberry st.,		23 42			23 42
Murray Hill avenue,				201 88	201 88
Myrtle st., I.O.,	123 88		123 62	2 14	249 64
Norfolk street,	59 61				59 61
North street,		31 80		81	32 61
Northampton avenue,				70 02	70 02
North Main st.,		138 12	8 20	288 07	434 39
Oak st., I. O.,	136 54			1 38	137 92
Oakland street,	16 53	20 92	2 00		39 54
Orange street,	20 45				20 45
Olive street,		19 64	2 06		21 70
Palmer avenue,		6 75	19 17		25 92
Parker st., I.O.,	916 54			11 50	928 04
Parkwood st.,				70 95	70 95
Pasco street,	108 92			38 85	147 77
Patton street,		10 51	26 85		37 36
Pearl street,		23 25	26 61	10 68	60 54
Pine street,		51 86	21 80		73 66
Plainfield st.,		85 78		7 47	93 25
Plumtree road,	400 92			20 00	420 92
Princeton st.,		182 26	1 13		183 39
Pyncheon street,		15 27	15 71		30 98
Quincy street,	28 19				28 19
Revere street,	67 21				67 21
Salem street,		24 79	4 94		29 73
School street,		17 99		15 75	33 74

GENERAL REPAIRS—CONTINUED.

Street.	Gravel.	Macadam.	Sewer Inlets.	Miscel- laneous.	Total cost.
Sharon street,		\$12 23	\$28 89	\$2 38	\$43 50
Sherman road,	\$115 07				115 07
Sherman street,	1 68	21 26			22 94
South street,	27 09	28 01			55 10
Spring street,		181 80	87 26	81	269 87
Springfield st.,	75 14	15 23	59 83	3 12	78 18
St. James ave ,		52 88	81	67 43	196 263
State street,		626 38	350 12	804 01	1,780 51
Stockbridge st.,		15 90	9 34	30 92	56 16
Stony Hill road,	186 32				186 32
Summer street,		68 68	84 14	39 16	191 98
Sumneravenue,	253 23	27 40	10 57		291 20
*Sundry streets,	344 14	461 40	306 00	308 98	1,420 52
Taylor street,		24 54	17 33		41 87
Tenth street,		23 85	14 82		38 67
Tinkham road,	57 63			33 88	91 51
Tyler street,	28 95	3 55			32 50
Union street,		66 03	8 19	3 56	77 78
Vernon street,			15 91	47 08	62 99
Vine street,		4 37	16 18		20 55
Walker street,				37 50	37 50
Walnut street,		346 72	329 82	35 73	712 27
Warner place,				129 38	129 38
Warriner ave.,		3 45	32 34		35 79
Warwick ave.,	6 06	32 13	5 62		43 81
Water street,		281 32	346 32	6 99	634 63
West street,		50 83			50 83
Westernview st.			22 81		22 81
White street,	76 13	19 33			95 46
Wilbraham rd.,	918 64	53 14	4 13	107 75	1,083 66
Willow street,		80 87	90 52		171 39
Winchester st.,	24 45				24 45
Worcester st.,					
I. O.,	811 53		12 74	65 00	389 27
Worthington st.		194 41	204 51	17 65	416 57
	\$8,146.00	\$5,212.63	\$3,673.84	\$3,827.15	\$20,859 62

\* Individual street repairs costing less than \$20.00.

## SIDEWALKS AND CURBING.

Street.	SIDEWALKS.		CURBING.	
	Material.	Descript'n.	Length in feet. 4'	6'
Acushnet avenue,				
Adams street,			6	3
*Andrew street,	Brick,	New,	556	
*Armory street,	Brick,	New,	5	
Berkshire street, I. O.,			75	
*Bliss street,	Brick,	Relaid,		
*Bowdoin street,			147	
Bridge street,				16
*Clark street,	Cinder,	New,	211	
Cliftwood avenue,			26	
*Commonwealth avenue, (incomplete),	Tar concrete,	New, Recoated,		
Dickinson street,			9	
Forest Park avenue,			24	
*Franklin street,	Brick,	New,		77
*Fulton street,	Cinder,	New,	6	
	Brick,	Relaid,		
*Genesee street,	Brick,	New,	482	141
*Grace street,	Cinder,	New,		
High street,			434	
*Homer street,			1,230	
Horace street,			575	
*Ladd street,	Brick,	New,	316	
*Lenox street (incomplete),			451	
Locust street,				86
*Loring street,	Brick,	Relaid,		
*Main street,	Brick,	Relaid,		
Main street, I. O.,			10	
*Monroe street,			2,269	
Mulberry street,			4	
*North Main street,	Brick,	Relaid,		
*Oak street, I. O. (incomplete),			144	
*Orange street (incomplete),			1,583	
Parker street, I. O.,			156	
*Parkwood street,			221	

SIDEWALKS AND CURBING—CONTINUED.

Street.	SIDEWALKS.		CURBING.	
	Material.	Descript'n.	Length in feet. 4"	6"
* Pearl street,	Brick,	Relaid,	15	
* Revere street,			2,557	
Springfield street,				271
* State street,	Brick,	Relaid,	50	
* Sumner avenue,			1,474	
* Taylor street,	Brick,	Relaid,	15	
* Union street,	Brick,	Relaid,		291
Walnut street,			14	
* Westminster street,			111	
White street,			314	
* Wight place,	Brick,	New,	317	9
* Wilcox street,	Brick,	Relaid,	8	
* Woodside terrace,			906	
(west of Belmont ave.,)				
Worcester street, I. O.,			304	
York street,				6
			15,435	846

\* In accordance with an order of the City Council.

STREETS MADE PUBLIC.

Name.	Limits.	Length in feet.
Franklin street,	East line Webster street to west line Murray hill avenue,	200
Grand street,	Malden to White street,	800
Greenwich street,	North Main to Becket street,	643
Homer street,	State street to Wilbraham road,	580
Mountainview street,	Forest Park avenue to Belmont ave.,	680
Portland street,	North Main street to Birnie avenue,	610
Railroad street,	Main to Water street,	560
Richelieu street,	Adams street southerly,	440
Worcester street, I. O.,	Extension to Lyons street,	1,120
		5,633

**STREETS RELOCATED.**

<b>Name.</b>	<b>Limits.</b>	<b>Length in feet.</b>
<b>Alden street,</b>	<b>Hickory street easterly,</b>	300
<b>Central street,</b>	<b>Maple to Mill street,</b>	3,950
<b>Mulberry street,</b>	<b>Maple to Union street,</b>	1,950
<b>Parker street,</b>	<b>Wilbraham road southerly,</b>	1,060
<b>Union street,</b>	<b>Ingraham avenue to Oak street,</b>	1,550
<b>Walnut street,</b>	<b>State to Hickory street,</b>	5,080
		<hr/> 13,890

**INVENTORY.****STREET AND SEWER DEPARTMENTS.**

<b>Automobile,</b>		\$800 00
<b>City yard, Lyman street,</b>		12,800 00
<b>City yard, Logan street,</b>		7,000 00
<b>Trap rock quarry, Westfield,</b>		225 00
<b>Engine, engine house, trap rock crusher and tools,</b>		1,500 00
<b>Gravel bank, Five Mile pond,</b>		100 00
<b>Gravel bank, Island pond,</b>		380 00
<b>Gravel bank, Boston road,</b>		80 00
<b>Six steam rollers,</b>		11,100 00
<b>Steam roller house,</b>		1,200 00
<b>Sixteen horses, wagons, sleighs, harness, etc.,</b>		4,747 20
<b>Thirty-four street watering carts,</b>		4,618 90
<b>Tools and road materials,</b>		13,523 39
		<hr/> \$58,074 49

For information in detail as to quantities, kinds and costs of work done during the year, you are referred to other portions of this report.

It may be said that the street work of the most importance consists of laying bitulithic paving on seven important thoroughfares, aggregating a total of 18,371 square yards.



## PAVING.

The following bids for laying bitulithic or bituminous macadam pavement, received by the Supervisors of Highways and Bridges, after formal advertisement, were rejected after careful deliberation: Frederick A. Malette, Geneva, N. Y., bituminous macadam at \$1.74 per square yard; Warren Brothers Company, Boston, Mass., bitulithic at \$2.25 per square yard; Barber Asphalt Paving Company, Boston, Mass., bituminous macadam on broken stone foundation at \$1.99 per square yard; on concrete foundation at \$2.19 per square yard.

It was decided that the work should be done directly by the Street Department, using Warren Brothers Company's mixing plant, bituminous material, and skilled men. Under this method the work would not be guaranteed for any term of years, but it was thought that it could be done cheaper by the city, and the saving in cost would more than suffice to pay for the cost of any repairs necessary during the usual period of guarantee.

The contract with Warren Brothers Company provided for the rental of its mixing plant at a rate of twenty-five dollars per day; for bituminous materials necessary to lay bitulithic, at a rate of seventy cents per square yard of pavement laid, and for the furnishing to the city of skilled men at their usual rates of wages.

Under this arrangement the work was done in the best possible manner, and resulted in a saving of \$2,006.10, which unless the actual cost of repairs greatly exceeds that estimated, will be considerable more than the cost of maintaining the pavements for the usual period of guarantee of five years.

It may not be amiss to say that the bitulithic pavement laid in 1904 has proved satisfactory, no complaints, aside from those relating to the dust which rises from its surface, having been lodged in this office. Extra precautions in the way of watering

the pavements above referred to have greatly reduced the amount of dust, and it is expected that as most of the fine particles of rock, which were rolled into the finished pavement, have now been worn and cleaned off, the cause for complaint will be removed.

The paving of Ferry and Sharon streets roadways with some form of material which will admit of thorough cleansing is demanded as a sanitary measure, at the earliest possible moment. The population in these streets is greatly congested, and the roadways, in the absence of other places, are used of necessity by children at play, and largely by adults in the transaction of business.

#### GRAVEL AND MACADAM.

The lengths of streets newly graveled and macadamized are 4,195 and 15,150 feet respectively, and the necessity for a normal amount of graveling, macadamizing and paving during the coming year is apparent. It is hoped that adequate appropriations for such work may be made next year.

#### CHANGE IN AUTHORITY RELATING TO STREETS.

By order of the City Council, approved by the Mayor, December 20, 1904, that part of Long Hill street between its junction with Washington boulevard and its intersection with South street, and that part of South street between the Longmeadow town line and a point opposite the easterly end of the South End bridge, were added to Forest Park, and are now cared for by the Park Commissioners of the city.

#### WASTE CANS.

At the suggestion of the Ferry Street Settlement Association, a number of cans have been placed on :

walks of Ferry street for the deposit of waste materials. I regret to say that, while those responsible for the suggestion used every endeavor to make these cans effective, the cans have not proved very useful. It is hoped that in time the many advantages attending their proper use may appeal to those who are to be benefited the most.

### CITY HALL FIRE.

Immediately after the burning of the City Hall; the Street Department was called upon to remove large quantities of refuse building materials from Court street and Court Square avenue, and afterwards some of the more dangerous walls were taken down. The Committee on City Property caused the tower, the front, and a part of the easterly wall to be taken down under contract with individuals.

### SPRINGFIELD STREET RAILWAY COMPANY.

During the year the control of the Springfield Street Railway Company has passed from the hands of local men to the Springfield Railways Company.

The most important track work done by this company has been the partial completion of track laying between Indian Orchard village and Chicopee Falls through Main, Front, and Worcester streets, in accordance with a grant of location given by the Board of Aldermen and approved by the Mayor on July 26, 1904. The work has been of very satisfactory quality and is complete, with the exception of certain gutter paving, the probable building of a new underpass under the Athol Branch of the Boston & Albany railroad near the plant of the Fiberloid Company, the widening and rip-rapping of the river bank at Burcham Bend, and a few other minor details.

Cars are now running from Indian Orchard village as far as the Fiberloid Company's plant.

In addition to the above, the Street Railway Company has substituted full grooved rails for the T rails in Central street between Pine street and the Watershops, and in Walnut street between King and Cedar streets, said changes having been made at the request of the Supervisors of Highways and Bridges, preparatory to the macadam resurfacing of the former street and the laying of bitulithic paving in the latter street, by the city. At the request of the same Board, the tracks in Belmont avenue between Garfield street and Sumner avenue and in Plainfield street from Washburn to Newland street, were raised to agree with the newly laid macadam surfaces.

The experiment of welding rail joints has also been tried on the following streets: Sumner avenue between the main entrance to Forest Park and Belmont avenue; Fort Pleasant avenue and Belmont avenue between Garfield street and Sumner avenue. This work was done in the early fall, and it remains to be seen whether the practice will prove economical from the Street Railway Company's or the city's viewpoint. At any rate, the rails have broken apart at a number of places on account of contraction due to cold weather.

### WATERING STREETS.

Eighty-three and seventeen hundredths miles of streets have been watered during the season, an increase of four and one hundredth miles over the length watered during the year 1904.

The use of cars for watering those streets containing car tracks has been continued, a contract for such work having been made with the American Car Sprinkler Company of Worcester, Massachusetts, for the use of two cars during the whole of the season, supplemented by a third car during five mo

of 21.73 miles of streets were watered under this contract. The balance of watering was done as heretofore, under contract with individual team owners for horses and drivers, the carts being furnished by the city.

### CURBING.

The setting of curbing in some soils on a concrete base, tried in 1904 for the first time, has proven very satisfactory, and consequently considerable curb has been set and reset during the past season in this manner.

It gives me pleasure to express thanks to Michael Roane and Arthur H. Woodward, first and second assistants.

I would also express my appreciation of the uniform courtesies extended during the year by Mayor Francke W. Dickinson, Alderman William R. Sessions, and Councilman Howard O. Buck, members of the Board of Supervisors of Highways and Bridges.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

*Report on Streets.*

**BOARD OF ALDERMEN**, December 28, 1905.

**Read, accepted, ordered** printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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**COMMON COUNCIL**, December 28, 1905.

**Read and concurred.**

H. S. GILBERT, *Clerk.*

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**Presented to the Mayor** for approval, December 30, 1905.

E. A. NEWELL, *City Clerk.*

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**MAYOR'S OFFICE, SPRINGFIELD, MASS.**, December 30, 1905.

**Approved.**

FRANCKE W. DICKINSON, *Mayor.*

TABLE OF MACADAMIZED STREETS.

\* Includes Macadam laid by Spfd. Street Ry. Co.

\*\* Macadam laid by Spfd. Street Ry. Co.

† Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
† Agawam street,	Pecousic avenue to South street,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Allen street,	Mill to Randall avenue,	2,253	*7,935
Allendale street,		663	2,094
Amherst street,	Harvard to Monmouth,	1,233	4,069
Andrew street,	State to Burr,	1,008	3,213
Arbor street,		437	1,222
Armory street,	Federal to Warwick ave.,	2,305	7,688
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
† Avon place,		67	386
Bancroft street,		1,435	4,865
Barnes street,		180	561
Bay street,	St. James avenue to Cambridge st.,	4,469	*14,853
Beech street,		528	1,303
Belmont avenue,	Woodside avenue to Oak- land street,	2,599	7,043
Belmont avenue,	Sumner avenue to White,		**3,700
Belmont avenue,	south side Garfield street to Sumner avenue,	1,624	4,170
Berkshire street,	State to Oak, I. O.,		**31,291
Bliss street,	Water to Main,	958	3,053
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Wor- thington street,	1,152	3,837
Boylston street,		1,807	864
Bradford street,		862	2,935

*Report on Streets.*

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Bridge street,	old toll bridge to Main, and Dwight to Chestnut,	817	3,009
Broad street,		959	3,177
Brookline avenue,		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,407
Catharine street,	Bay to Dartmouth,	150	493
Cedar street,		1,962	6,655
Central street,		4,903	12,832
Central street,	Cedar to Mill,		**2,705
Charles street,	Liberty to Franklin,	618	1,888
Chestnut street,	State to Worthington, and east side, Jefferson ave. to City Hospital,	3,064	7,501
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clark street,		619	1,100
Clarendon street,	north from Worthington,	204	674
Clinton street,		703	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court Square av.,	689	2,052
Cross street,	Willow to Maple.	608	1,416
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliott street,		1,	



# *Report on Streets.*

29

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Elm street,	N.Y., N.H. & H. R.R. to Court Square,	818	2,089
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Everett street,		1,500	4,859
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,	Talcott to Wason,	1,126	5,005
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,666
Forest Park avenue,	Sumner to Forest street,	752	3,846
Fort Pleasant avenue,	west side,	2,794	10,138
Franklin street,	Main to Charles, and Cass to Webster,	2,531	8,781
Fremont Street,		778	2,593
Fulton street,		3,569	11,093
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
George street,	Maple easterly,	110	647
Grace street,		354	885
Grant street,		577	1,603
Gray's avenue,		560	1,300
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hancock street,	Florence to State,	3,429	*11,613
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorne street,		540	1,374
Hebron street,		698	2,204
Hickory street,	Walnut to Sheffield street, and Alden street east- erly,	3,341	8,547
High street,		2,563	5,544
Hillman street,		647	1,081
Holyoke street,		776	2,001
Howard street,	N.Y., N.H. & H. R.R. to Main street,	1,277	4,326

*Report on Streets.*

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Hubbard avenue,		568	1,063
Huntington street,		643	†2,143
Ingraham avenue,		258	462
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Kibbe avenue,		213	710
King street,	Walnut to Highland divi- sion N. Y., N. H. & H. R.R.,	2,885	*9,507
Lafayette street,		568	1,865
Lebanon street,		1,926	5,233
Liberty street,	Main street easterly, and Walcott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chic- opee line,		**9,920
Linden street,		1,287	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Loring street,		707	2,294
Lyman street,	Chestnut to Spring,	734	2,544
Madison avenue,		529	1,657
Magazine street,	Lincoln to Armory,	734	2,434
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Front street to point 104 ft. east of Rogers av.,	4,403	15,953
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George st.,	1,565	4,572
Marble street,		1,074	3,508
Margaret street,	Water to Main,	842	2,807
Market street,		961	1,792
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Morgan street,		859	
Morris street,		1,	
Mulberry street,	Maple to Ridgewood place,		
Myrtle street,		4	
North street,	Carew to Waverly,	2,	

# *Report on Streets.*

31

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
North Main street,	Carew to Chicopee line,	7,115	*37,180
Norwood street,		1,117	2,911
Oak street,		1,844	4,136
Oak street, I. O.,	Berkshire to Main,	1,097	4,051
Oak street, I. O.,	Berkshire to Main,		**2,078
Oakland street,	Belmont ave. to Orange street,	1,817	6,104
Olive street,		478	1,248
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow, and foot of hill to Maple,	865	2,545
Patton street,		1,631	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	South street to South street,	2,205	7,350
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344
Plainfield street,	B. & M. R. R. to New- land street, and De- mond ave. to Wason avenue,	1,942	5,486
Plainfield street,	Washburn to Wason ave.,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597
Portland street,	N. Main to Birnie ave.,	610	2,033
Princeton street,	Bay to St. James avenue,	1,509	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Pynchon street,		868	2,810
Quincy street,	Oak to Hancock,	1,359	3,878
Ringgold street,		730	2,432
Rutland avenue,		277	926
Rutledge avenue,		516	1,599
Salem street,	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,278
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895

*Report on Streets.*

NAME OF STREETS,	Limits.	Length in feet.	Area in sq. yds.
Sheldon street,	Birnie avenue to N. Main,	651	2,027
Sherman street,	State to Bay,	1,528	5,078
South street,	Agawam st. to Mill river,	1,863	6,878
Spring street,		2,373	7,322
Springfield street,	Chestnut to dingle, and Hamburg street to Chicopee line,		**1,242
Spruce street,		699	1,737
State street,	Water to Main, City Li- brary to Federal, Oak to Sherman, and Highland Div. N.Y., N. H., & H. R. R. to Berkshire street,	18,966	*67,971
Stearns Park avenue,	east of park,	259	461
Stebbins street,	Union to Quincy,	186	621
St. James avenue,	State to Highland division N.Y., N.H. & H.R.R.,	5,470	15,557
St. James avenue,	State to end of track,		**5,213
Stockbridge street,		635	1,617
Summer street,	east of Spring,	567	1,512
Summer street,	Federal to Armory,	378	1,260
Sumner avenue,	Longhill street to Forest Park entrance,	3,215	15,227
Sumner avenue,	Longhill street to White,		**11,631
Taylor street,		413	1,310
Temple street,		953	2,570
Tenth street,		1,577	4,451
Thompson street,		2,093	6,606
Townsley avenue,		198	214
Tyler street,	Oak to Hancock,	1,346	4,002
Union street,	Water to foot of hill, Maple to School, and Mul- berry to Eastern ave.,	6,088	19,878
Vernon street,		823	1,952
Vine street,		745	1,892
Vinton street,		612	2,465
Walnut street,	Mill to Lebanon street,	1,947	*2,121
Warriner avenue,		450	

# *Report on Streets.*

33

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Wason avenue,	B. & M. R. R. to North Main street,	505	1,718
Wason avenue,	B. & M. R. R. to North Main street,		**449
Water street,		5,145	16,525
Waverly street,		850	2,910
Webster street,		606	2,020
West street,		1,195	3,872
Westminster street,		1,911	6,388
White street,	Allen to Orange,	1,800	3,505
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham road,	State to Homer street,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton street,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water street,	1,307	4,000
William street,	N.Y., N.H. & H.R.R. to Main,	1,368	4,359
Willow street,	Union to State,	895	2,493
Winthrop street,		659	2,397
Worthington street,	Water to Cook's ave., and Spring to St. James avenue,	3,830	5,375
Yale street,	Dartmouth to Monmouth,	1,493	5,142
York street,		1,000	2,997
Total,	- . . . . .	262,242	995,799

## TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Belmont avenue,	Hall street westerly,	Catakill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1906
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson ave.,	Bitulithic,	825	2,898	1905
Court street,	Main to Court Square avenue,	{ Rock asphalt, { Syracuse brick,	317	1,277	1897
Court Square avenue,	Court to Elm st.,	{ Rock asphalt, { Syracuse brick,	—	174	1897
Cypress street,	Main street, westerly,	Granite blocks,	193	503	1897
Cypress street,	Boylston to Fulton,	Granite blocks,	—	330	1897
Dwight street,	State to Lyman,	Syracuse brick,	459	1,700	1904
East Court street,	Main to Market,	Rock asphalt,	216	848	1905
Elm street,	Main to Court Square avenue,	{ Rock asphalt, { Syracuse brick,	2,324	9,905	1896
Fort street,	Main to Water,	Granite blocks,	117	297	1900
			343	949	1897
			—	330	1897
			670	1,770	1895

## Report on Streets.

TABLE OF PAVED STREETS—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Hampden street,	Main street, westerly,	Bitulithic,	212	821	1904
Hampden street,	completion, Main to Water,	Bitulithic,	394	1,539	1905
Harrison avenue,	Main to Dwight,	Trinidad asphalt,	586	2,247	1896
Liberty street,	Chestnut to Cass,	Syracuse brick,	1,399	4,571	1900
Liberty street,	Cass to Heywood avenue,	Syracuse brick,	1,147	3,971	1901
Lyman street,	Main to Chestnut,	Granite blocks,	1,806	4,599	1889
Main street,	Locust to Marble,	Syracuse brick,	840	4,881	1897
Main street,	Marble to William,	Syracuse brick,	1,762	8,307	1896
Main street,	William to Bliss,	Granite blocks,	1,148	5,475	1893
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood blocks, 8" x 3½" x 8",	1,899	10,798	1904
Main street,	Worthington to Hampden, west side,	Creo-resinate wood blocks, 8" x 3½" x 8",	382	1,183	1904
Main street,	Worthington to Hampden, east side,	Creo-resinate wood blocks, 4" x 4" x 8",	—	962	1903
Main street,	Hampden to Lyman,	Creo-resinate wood blocks, 4" x 4" x 8",	153	775	1903
Main street,	Lyman to Liberty,	Creo-resinate grooved wood blocks, 4" x 4" x 8',	484	2,780	1903
Main street,	Liberty to Sharon, east side,	Creo-resinate wood blocks, 4" x 4" x 8",	453	1,135	1903

TABLE OF PAVED STREETS—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Liberty to Cypress, west side,	Granite blocks,	—	880	1890
Main street,	Cypress to Sharon, west side,	Granite blocks,	—	580	1891
Main street,	Sharon to Emery and Franklin,	Granite blocks,	545	2,920	1891
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,605	1897
Main street,	Emery to Sargeant, west side,	Catakill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catakill and Metro- politan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main to library,	Granite blocks,	1,019	4,084	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	Sherman to Highland Div. N. Y., N. H. & H. R. R.,	Bitulithic,	820	4,352	1905
Summer street,	Autumn to Kibbe avenue,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,	Granite blocks,	787	2,685	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave., to Lebanon street,	Bitulithic,	1,195	3,888	1905



TABLE OF PAVED STREETS—CONCLUDED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
White street,	Allen to Orange,	Syracuse brick,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Cook's ave.,	Bitulithic,	404	1,418	1905
Total,	.	.	47,015	178,401	



THIRTY-SEVENTH ANNUAL REPORT  
OF THE  
**SEWER DEPARTMENT.**

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SPRINGFIELD, MASS., December 28, 1905.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 10, 1905.

**RECEIPTS.**

By appropriation, . . . . .	\$28,000 00	
Sewer entrances, fees, . . . . .	7,587 25	
Sewer entrances, for labor and material, .	3,099 42	
From departments and private parties, bills rendered, . . . . .	1,674 14	
	<hr/>	\$40,360 81

**EXPENDITURES.**

**REGULAR.**

Building and connecting private drains, .	\$2,888 28
City teams, uncredited balance, . .	202 37
City yard, . . . . .	1,028 29
Engineering, . . . . .	737 34
Inspecting private sewers, . . . . .	108 00
Office and general expenses, . . . . .	985 90
Salary of first assistant superintendent, .	1,200 00
	<hr/>
Amount carried forward,	\$7,150 18

*Report on Sewers.*

Amount brought forward,	\$7,150 18
Sewers, { cleaning, . . . . .	2,330 07
{ construction, . . . . .	17,275 78
{ flushing, . . . . .	2,188 38
{ repairs, . . . . .	1,063 33
Supplies, . . . . .	86 13
Tools, . . . . .	428 15
Work and material billed departments, . . . . .	709 97
Work and material billed private parties, . . . . .	1,076 70
	<hr/>
	\$32,308 69

## Transferred to

Watering Streets account, . . . . .	\$1,000 00
Mill River Valley sewer, . . . . .	3,500 00
Engineering department, . . . . .	500 00
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5,000 00

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\$37,308 69

Credit by material from inventory, . . . . .	55 38
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\$37,253 31

Unexpended balance, . . . . .	3,107 50
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\$40,360 81

## SPECIAL.

## Mill River Valley sewer:—

Limit of expenditure, . . . . .	\$95,850 00
Expended prior to December 10, 1904, . . . . .	\$72,600 08
Expended since December 10, 1904, . . . . .	22,818 85
	<hr/>
	95,418 43
Unexpended balance, . . . . .	\$431 57

## BILLS RECEIVABLE.

Bills unpaid December 10, 1904, . . . . .	\$297 76
Bills committed during the year 1905, . . . . .	1,814 53
	<hr/>
	\$2,112 29
Bills paid during the year 1905, . . . . .	\$1,674 14
Abatements and corrections, . . . . .	19 05
	<hr/>
	1,693 19
Bills unpaid December 10, 1905, . . . . .	\$419 10

**SEWER CONSTRUCTION CLASSIFIED.**

Sizes vitrified clay pipe.	LENGTH.		Total.
	New Construction.	Reconstruction.	
8"	366'		366'
10"	2,787'	849'	3,636'
12"	2,349'	1,193'	3,542'
15"	874'		874'
18"	529'	793'	1,322'
20"	892'	861'	1,753'
24"	54'		54'
	7,851'	3,696'	11,547'

Sizes brick sewer.	Length new construction.	Total.
1'-10" x 2'-9"	670'	670'
2'-2" x 3'-3"	2,086'	2,088'
	2,756'	2,756'

## SEWER CONSTRUCTION ITEMIZED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Adams street, Richelieu street west- erly .....	Clay	237	12"	\$304 12
Allen street, Oakland to Mill street ..	Clay	365	10"	447 19
Armory street, extension southerly near Armory street avenue ...	Clay	325	10"	193 87
Beech street, manhole .....		....	....	21 38
Belmont avenue, flush gate .....		....	....	37 40
Cambridge street, flush gate .....		....	....	15 28
Center street, I. O., manhole and flush gate .....		....	....	56 42
Central street, Mill to Hancock street (completion) .....	Brick	....	....	20 02
Central street, Hancock to Spruce street, relaying .....	Clay	861	20"	1,344 35
Chestnut street, south of Bancroft street, relaying .....	Clay	108 19	12" 10"	190 55
Cumberland street, North Main street easterly .....	Clay	147	15"	182 77
Euclid avenue, Dickinson street west- erly .....	Clay	350 350	15" 12"	773 10
Euclid ave., Dickinson street easterly	Clay	275	10"	307 83
Ferry street, manhole .....		....	....	39 31
Forest Park avenue, Sumner avenue, southerly, relaying .....	Clay	438	10"	318 29
Greenwich street, Becket street east- erly (completion) .....	Clay	230 22	12" 10"	151 48
Hampden street, I. O., Holly street easterly .....	Clay	150	10"	128 67
Hampden street, I. O., Chestnut street easterly, relaying .....	Clay	174	12"	299 12

SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Hampshire street, I. O., manhole and flush gate .....		....	....	\$56 44
Hickory street, manhole .....		....	....	29 32
Holly street, I. O., Worcester to Hampden street .....	Clay	377	15"	419 11
Homer street, manhole .....		....	....	31 08
Horace street, Dickinson street northerly .....	Clay	363 411	12" 10" }	783 12
Kensington avenue, Oakland street easterly .....	Clay	330	18"	493 42
Magnolia terrace, manhole .....		....	....	25 57
Market street, Sanford street southerly, relaying .....	Clay	200	12"	412 04
Mechanic street, flush gate .....		....	....	13 82
Medford street, Birnie avenue easterly, relaying .....	Clay	390 183	*12" *10" }	.....
flush gate .....				18 04
Mill River valley intercepting sewer, } Hickory street to Gunn } square brook by northerly } shore of Watershops pond } (completion) .....	Brick	2,086	2'-2" x 3'-3" Elliptical	22,818 35
Morgan street, Garden Brook easterly, relaying .....	Clay	626	18"	1,439 59
Myrtle street, I. O., Worcester street easterly .....	Clay	378	10"	355 34
New street, Dwight street westerly ..	Clay	164	10"	203 79
North Main street, extension Morgan street southerly .....	Clay	130	8"	129 20
Oak street, I. O., manhole and flush gate .....		....	....	52 73
Pasco street, I. O., flush gate .....		....	....	22 95

\* Cost borne by private parties.

## SEWER CONSTRUCTION ITEMIZED.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Portland street flush gate .....		....	....	\$19 35
Portsmouth street (incomplete) .....	Clay	....	....	40 59
Railroad street, Water street east- erly.....	Clay	351	12"	490 75
Richelieu court, Adams st. southerly	Clay	160 260	12" } 10" }	452 29
Riverview street, Forest Park avenue southerly.....	Clay	299	10"	217 39
Spring street, flush gate.....		....	....	18 83
Springfield street, Atwater terrace northerly.....	Clay	892 209	20" } 18" }	1,988 87
State street, at old High School, con- necting old with new brick sewer.....	Clay	236 54	8" 24"	..... 161 88
State street, manhole .....		....	....	45 53
Walden street, flush gate.....		....	....	18 01
Walnut street, manhole and flush gate		....	....	52 00
Water street, Worthington street southerly, relaying.....	Clay	209	10"	333 54
Water street, Hampden to Railroad street, relaying.....	Clay	321	12"	638 58
Westernview street, Forest Park avenue easterly .....	Clay	468 138	12" } 10" }	511 16
White street, extension southerly ...	Clay	190	12"	190 99
Worcester street, I. O., Chestnut to Holly street .....	Brick	670	1'-10" x 2'-9" } egg shape }	2,398 09
Worthington street, Armory Hill sewer, westerly to Magazine street .....	Clay	167	18"	381 28
		14,303		\$40,094 13

\* Cost borne by private parties.



**PIPE SEWERS BUILT BY PRIVATE PARTIES.**

LOCATION.	Material.	Length in feet.	Size.
Atwater Terrace road.....	Clay	521	18"
Green Lane .....	Clay	744 143	12" } 10" }
Rimmon avenue .....	Clay	859	18"
Weaver Ramble .....	Clay	480	12"
		2,747	

## SEWERS ABANDONED—1905.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Central street, Hancock to Spruce street.....	Cem.	866	15"	\$952 57
Chestnut street, south of Bancroft street.....	Cem.	127	12"	90 18
Forest Park avenue, Sumner avenue southerly.....	Clay	434	10"	.....
Hampden street, I. O., Chestnut street easterly.....	Cem.	174	12"	113 97
Market street, Sanford street southerly	Brick Cem.	147 200	.... } 15" }	224 24
Medford street, Birnie ave. easterly	Clay	280 234	12" } 10" }	.....
Morgan street, Garden brook easterly	Clay Cem.	82 543	18" 18"	212 38 1,044 64
Richelieu court, Cooley lot northerly	Clay	301	10"	.....
State street, Dwight street to old High school.....	Brick	668	2' cir.	1,008 63
Water street, Hampden to Railroad street.....	Cem.	319	15"	446 60
Water street, Worthington street southerly.....	Cem.	225	12"	233 50
Worthington street, Armory Hill sewer to Magazine street.....	Cem.	158	18"	375 10
		4,758		\$4,701 83

SUMMARY.

DESCRIPTION.	Length in Feet.	Cost.
Brick sewers built by regular appropriation.....	670	\$2,898 09
Brick sewer built by special appropriation.....	2,086	22,818 35
Clay pipe sewers built by regular appropriation .....	11,547	14,304 29
Flush gates and manholes built by regular appropriation.....		578 40
	14,303	\$40,094 13
Clay pipe sewers built by private parties .....	2,747	.....
	17,050	\$40,094 13
Sewers abandoned.....	4,758	4,701 83
Net addition carried to sewer table.....	12,292	\$35,392 30

SEWER CLEANING AND REPAIRS.

	Cleaning.	COST OF Repairs.
Allen street, . . . . .		\$10 09
Bridge street, submerged outlet, . . . . .		41 23
Carew street, . . . . .	\$92 56	20 09
Clinton street, submerged outlet, . . . . .	16 10	
Cook's avenue, . . . . .		20 83
Demonst avenue, . . . . .		13 69
Elm street, submerged outlet, . . . . .	39 82	
Ferry street, . . . . .	98 60	
Garden brook, . . . . .	815 58	16 05
Grace street, . . . . .		22 80
King street, . . . . .	12 75	
Lowell street, . . . . .	117 46	
Main street, . . . . .	337 11	
Main street, I. O., . . . . .		17 38
Pine street, . . . . .		24 05
Sanford street, . . . . .	92 55	
State street, . . . . .		528 27
Sewer connections, . . . . .	277 68	
Sundry sewers, costing less than \$10.00, . . . . .	21 85	330 46
Union street, . . . . .	132 52	
Walnut street, . . . . .		18 39
Worthington street, submerged outlet, . . . . .	275 49	
	\$2,330 07	\$1,063 33

**MILL RIVER VALLEY INTERCEPTING SEWER.**

Mention may be made of the completion of the Mill River Valley Intercepting Sewer from Hickory street along the north shore of the Watershops pond to Gunn Square brook, as ordered by the Board of Aldermen and approved by the Mayor, July 16, 1901. This work was done under contract with D. J. Curtis of this city, and was started and 53 per cent of its length was completed during the year 1904, as noted in my last annual report.

The construction was prosecuted under very adverse conditions, large quantities of water and running sand having been encountered. The tunnel section under the Highland Division, N. Y., N. H. & H. railroad was completed without accident or appreciable settlement of the superimposed soils. The usual methods of doing the work in soils of this sort, namely the use of poling boards, were successfully followed.

Gunn Square brook, which now receives the sewage from a number of houses in the vicinity of Gunn Square, for which no other sewer accommodations are available, has been diverted from the Watershops pond to the present terminus of the Mill River Valley Intercepting Sewer. This connection is, however, but temporary, as the Mill River Valley Intercepting Sewer is not designed to carry surface water, and the connection will be discontinued as soon as a proper system of sewers is built in the vicinity of Gunn Square.

It may be said that there remains to be paid the sum of \$2,154.22 on account of the construction of this sewer, which amount has been reserved for the period of one year from the date of completion of the work. The balance remaining unexpended in the Mill River Valley Intercepting Sewer Account amounts to \$431.57, and therefore the sum of \$1,722.65 will have to be appropriated during the year 1906 to enable the payment of the city's indebtedness to D. J. Curtis.

It is hoped that appropriations in addition

referred to may be made during the year, in order that this sewer may be extended and that necessary lateral sewers may be built.

#### WORTHINGTON STREET SEWER OUTLET.

The Worthington street submerged sewer outlet has again caused some trouble and expense on account of stoppage. This was probably caused by sand which entered the sewer at a remote tributary to the main sewer, which proved defective.

#### ALLEN STREET SEWER DIVERSION.

By order of the Board of Aldermen, approved by the Mayor, August 4, 1904, the lower end of the Allen street sewer has been extended, thereby diverting the dry weather sewage flow into the Mill River Valley Intercepting Sewer instead of directly into Mill river, thus preventing pollution of that river. A storm water overflow from the Allen street sewer system, emptying directly into Mill river, has been retained.

#### STATE STREET SEWER.

The sewer in State street lying between Dwight street and a point opposite the Church of the Unity has been filled up and abandoned, its place having been taken by the sewer built in 1903, between the same limits. A connection between the old and the easterly end of the new sewer referred to above has been made.

I would renew the recommendations in my last annual report respecting the faulty condition of the State street sewer easterly of the Church of the Unity. This sewer has required numerous repairs during the present and past seasons, and should be rebuilt as far as Walnut street.

**MEDFORD STREET SEWER.**

The pipe sewer in Medford street between North Main street and Birnie avenue, built in 1903, has been moved to a position about fifty-nine feet northerly of its original location. This change was made at the request of, and at the expense of, the owner of the adjoining property, who desired to change the location of the street.

**WORTHINGTON STREET SEWER.**

The cement pipe sewer running northeasterly from the junction of Magazine and Worthington streets across Worthington street, thence under a dwelling house and across private lands on the northerly side of Worthington street into the Armory Hill sewer, broke down at the time of a heavy rain during the summer, causing some damage to the foundation of the dwelling house above referred to. This sewer has been abandoned and a new vitrified clay pipe sewer has been built wholly within the lines of Worthington street, connecting with the junction of the Armory Hill and Worthington street sewers.

The estimated cost of completing sewer work, which has been ordered by the Board of Aldermen to date, is practically \$33,700.

It gives me pleasure to express thanks to Aldermen Willis A. Ford, William R. Sessions, and William S. Warriner, members of the Committee on Sewers and Drains, for the uniform courtesies they have extended during the year.

It is with regret that I announce the death of Michael Roane, Assistant Superintendent of Streets, on December 23, 1905.

Mr. Roane has been in the employ of the city in various capacities since 1874, when he was elected Superintendent of Streets. For the past fifteen years he has served as

tinuously as Assistant Superintendent of Streets, and, as such, had charge of most of the work done by the Sewer Department.

Actuated by the highest motives, he endeared himself to all connected with him. He was at all times faithful to the interests of the city and just to all those with whom he came in contact. The department and the city have suffered a great loss in his death.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets and Sewers.*

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BOARD OF ALDERMEN, December 28, 1905.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 28, 1905.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 30, 1905.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 30, 1905.

Approved.

FRANCKE W. DICKINSON, *Mayor.*

## CITY OF SPRINGFIELD,

SEWER CONSTRUCTION TO DECEMBER 10, 1905.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly.	301	15"	Clay	\$497.38
	275	12"	"	
Acushnet avenue, Main street, easterly .....	294	20"	"	298.94
	279	18"	"	
	271	15"	"	
	26	12"	"	
Adams st., Main st. to Town brook .....	149	18"	"	\$322.22
Town brook, easterly .....	890	....	Brick	66.68
Richelieu st., westerly .....	237	12"	Clay	304.12
Alden st., Hancock to East- ern ave .....	595	18"	Cem.	1,529.54
	802	15"	"	
Eastern ave., to Wilbraham ave .....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	"	250.86
				2,691.79
Alderman st., Dickinson st., easterly .....	296	18"	"	916.78
	304	15"	"	
	300	12"	"	
	137	10"	"	
Alexander street, North street, easterly .....	288	10'	"	188.48
Alfred st., Birnie ave., easterly.	377	10"	"	.....
Allen ave., Allen st., easterly.	338	10"	"	232.78
Allen st., Mill river to Oakland st .....	216	24"	"	576.86
Mill to Oakland st .....	365	10"	"	447.19
Oakland st. to Plumtree rd..	686	24"	"	1,832.06
	383	18"	"	1,598.59
	474	15"	"	
	580	12"	"	
	1,603	12"	"	
	1,401	10"	"	881.58
				984.62
				6,320.90
Allendale st., North st., easterly	272	12"	"	401.43
	340	10"	"	
Amaron st., State st., southerly	349	10"	"	222.90
Amherst street, Harvard street, northerly .....	441	12"	Cem.	74.90
	25	10"	Clay	23.78
Princeton to Monmouth st..	512	12"	"	622.90
	191	10"	"	



SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Andrew st., State st., northerly	463	20"	Clay	\$1,753.67
	423	18"	"	
	382	12"	"	
	398	12"	"	
Arbor st., Butler to Carew st..				818.05
Arch st. (see Garden brook).				
Armory Hill Sewer (see private ways).				
Armory st., B. & A. R. R. to Liberty st.....	690	15"	"	\$1,165.47
	360	12"	"	
	271	10"	"	
	450	1'-10" x 2'-9"	Brick	
Liberty to Sullivan st.....	476	1'-8" x 2'-6"	"	2,439.42
	156	24"	Clay	
Sullivan to Carew st.....	267	20"	"	975.77
	290	12"	"	
	283	8"	"	
Carew st., northerly .....	81	20"	"	107.71
Springfield st., southerly...	146	18"	"	
	374	12"	"	317.00
Summer st., southerly.....	325	10"	"	
	570	15"	Cem.	193.87
Worthington st., southerly..				658.06
				6,242.08
Ashley st., Cedar st., easterly	65	18"	"	80.45
	580	15"	"	
	697	12"	"	
				1,453.92
				1,534.37
Atwater Terrace road, Green lane, westerly .....	521	18"	Clay	655.06
Auburn st., Fulton st., easterly	397	12"	"	
	335	10"	"	
Autumn st., Summer to Worthington st.....	239	15"	"	715.29
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4" x 5'-0"	Brick	
including Chestnut st., Bancroft to Montmorenci st..	379	3'-2" x 4'-9"	"	8,914.04
Montmorenci st., Chestnut st., easterly.....	43	3'-2" x 4'-9"	"	
Bay st., St. James avenue to Pleasant st.....	250	15"	Clay	715.01
	245	12"	"	
	228	10"	"	
	235	12"	"	
Florida to Pleasant st..	304	20"	"	321.02
Florida to Sherman st .....	377	18"	"	
	812	15"	"	
	151	8"	Cem.	
Sherman to Clarendon st...	194	10"	Clay	46.82
Catharine to Clarendon st...				200.66

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bay st., Bowles to Cambridge st.	1,037	2'-8" x 4'-0"	Brick	\$8,056.62
	360	2'-2" x 3'-3"	"	61.87
Cambridge st., easterly....	247	8"	Clay	\$11,440.05
Beacon st., Eastern ave. to				119.21
Colton st.....	250	10"	"	3.65
Colton st., easterly.....	124	8"	"	
Beaudry st., I. O., Main st.,	300	12"	"	122.86
southerly.....	270	10"	"	745.95
Beaumont st., Belmont ave.,				
northerly.....	250	12"	"	
	431	10"	"	403.87
Becket st., Arch to Hooker st.	1,048	24"	"	
Beech st., Central st., northerly.	410	10"	Cem.	95.58
Beechwood ave., Sumner to				
Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut st.,				
westerly.....	220	8"	"	
	140	6"	"	
Bellevue ave., Belmont ave.,				
easterly.....	300	18"	"	
	300	15"	"	
	194	12"	"	
Dickinson st., westerly....	744	10"	"	
Belmont avenue, Fort Pleasant				
ter., easterly.....	90	10"	"	93.92
Mill river to Woodside ter..	954	20"	"	2,698.67
Woodside ter. to Litchfield st.	660	2'-0" x 3'-0"	Brick	
	445	1'-10" x 2'-9"	"	11,750.19
	595	1'-8" x 2'-6"	"	
	550	1'-6" x 2'-3"	"	
Litchfield street to Kenwood				
Park.....	432	20"	Clay	1,451.53
	493	18"	"	
Kenwood Park to Sumner ave	301	15"	"	
	403	12"	"	842.40
	616	10"	"	
Sumner ave., southerly....	830	3'-4" x 5'-0"	Brick	8,216.97
	819	3'-0" x 4'-6"	"	25,053.68
Belmont court, Belmont ave.,				
southerly.....	216	10"	Clay	146.76
Benton st., State st., southerly.	301	12"	"	
	300	10"	"	513.96
	247	8"	"	
	320	8"	"	419.68
Berkeley st., Princeton to Mon-				
mouth st.....	483	12"	"	933.64
Berkshire st., I. O., Oak to				
Myrtle st.....	701	12"	Cem.	517.22
Oak st., easterly.....	326	12"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Berkshire st., Chestnut st. to Myrtle st .....	577	12"	Clay	\$545.74
Besse place, Main st., westerly.	290	10"	"	\$1,797.46
Birnie avenue, Wason avenue, northerly .....	362	24"	"	....
Wason ave., southerly .....	350	18"	"	579.11
	417	15"	" }	1,024.75
Worcester street extension, northerly to Grace st. ....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st. ....	144	12"	"	....
Douglas st., northerly .....	292	24"	Clay	....
	303	20"	"	....
	304	15"	"	1,149.93
	144	10"	"	....
Douglas st. to Thomas st. ....	373	1'-10" x 2'-9"	Brick	1,319.73
Thomas st., southerly .....	312	20"	Clay	768.74
	316	18"	" }	....
Bliss st., from Main to N. Y. N. H. & H. R. R. ....	1,284	12"	Cem.	4,842.26
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) .....	203	12"	"	1,150.71
Bond st., east from Garden brook sewer .....	341	2'-0" x 3'-0"	Brick	1,580.25
end of brick sewer to Chest- nut st. ....	959	24"	Clay	2,195.84
				3,776.09
Bowdoin st., Worthington st., southerly .....	673	15"	Cem.	740.00
Worthington to Ingersoll grove	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight, Catharine st., easterly and northerly .....	752	15"	"	1,058.67
	250	12"	Clay	50.82
	275	8"	" }	....
Boylston st., Cypress to Clinton street .....	610	18"	Cem.	1,109.49
	346	15"	" }	1,638.72
Brace street, Belmont avenue, northerly .....	137	10"	Clay	....
Bradford st., North Main to Fulton st. ....	352	15"	Cem.	....
	758	12"	" }	1,301.99
Bridge st., Main st. to Conn. River .....	798	12"	"	718.79
	275	15"	Clay	429.14
Main to Chestnut st. ....	1,158	2'-0" x 3'-0"	Brick	5,414.20
				6,562.13
Broad st., Hanover to Main st.	970	15"	Cem.	1,240.75

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Brookline avenue, North st., easterly .....	328	12"	Clay	\$29.57
	171	10"	"	
Brown st., Yale to Bay st. ....	483	10"	Cem.	357.65
	21	8"	"	
Buckingham place, Bay street, easterly .....	235	10"	Clay	168.97
Buckingham st., Bay to Claren- don st. ....	651	12"	"	\$597.24
Bay st., southerly .....	35	12"	Cem.	
State to Bay st. ....	305	18"	Clay	1,158.40
	345	15"	"	
	675	12"	"	1,755.64
Burr st., Andrew st., easterly. .	570	12"	"	428.83
Butler st., Chestnut to Cass st.	1,268	20"	"	2,021.96
Cass st., easterly .....	321	20"	"	520.71
				2,542.67
Calhoun st., North Main to North st. ....	853	12"	"	631.40
North st., easterly .....	300	8"	"	227.19
				858.59
Cambridge street, Bay street, southerly .....	276	20"	"	1,100.88
	331	18"	"	
	266	15"	"	411.63
	302	12"	"	
	278	10"	"	
Card-factory pond (see private ways).				1,512.51
Carew st., Main st. to Garden brook (cost shown under Clinton st.) .....		4'-6"x6'-9"	Brick	....
		5'-0"	"	....
Garden brook to Prospect st.	1,456	4'-3" cir.	"	21,913.22
	1,257	3'-0" cir.	"	
	791	2'-8" cir.	"	671.51
Massasoit street, easterly...	580	18"	Cem.	
	200	12"	"	153.28
Armory st. to Liberty st. ....	1,101	10"	Clay	787.87
	448	8"	"	
				23,525.88
Cass st., Liberty to Franklin st.	500	12"	"	457.99
	163	10"	"	
Linden st., southerly .....	596	15"	"	892.07
Linden st., northerly .....	224	12"	"	
				1,350.06
Catharine st., Dartmouth to McKnight st. ....	833	2'-0"x3'-0"	Brick	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Catharine street, State st. to McKnight st.....	348 438 333	15" 12" 10"	Clay " } " }	\$1,348.95 \$5,777.87
Cedar st., Pine to Walnut st...	180	3'-10" x 5'-9"	Brick	889.35
Pine st., westerly.....	1,074 378	3'-8" x 5'-6" 12"	" Cem.	6,206.73 288.32
				7,384.40
Cedar st., I. O., Main st. to river.....	433	2'-0" x 3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	198.76
Cemetery brook (see private ways).				2,200.20
Center st., I. O., Oak to Pine st	463	12"	Cem.	510.73
Central st., Main st., easterly..	99 546	15" 12"	" "	147.60 385.49
Main to near Maple st....	527 700	2'-0" x 3'-0" 1'-8" x 2'-6"	Brick " }	2,275.08
near Maple street to Sterns terrace.....	769 105	18" 12"	Clay "	1,211.88 199.95
Sterns terrace to Cedar st...	334	18"	Cem.	102.50
Pine st., westerly.....	500	12"	Clay	481.38
Pine to Spruce st.....	339 335 310	12" 12" 10"	Cem. Clay " }	376.00 514.05
Spruce to Hancock st....	861	20"	"	1,344.35
Hancock st. to Mill st....	597	2'-0" x 3'-0"	Brick	2,135.31
Mill st. to Mill river. ....	40	24"	Clay	136.83
Central st. ave., Knox to Cen- tral st. ....	279 285	10" 12"	Cem. "	197.64 44.07
				241.71
Chapel street, Eastern avenue, easterly.....	400	10"	Clay	208.13
Chapin st., State st. to Marion street.....	349 359	15" 12"	" " }	746.99
Chase ave., Fort Pleasant ave., easterly.....	238 333	12" 10"	" " }	24.49
Charles st., Liberty st., northerly	654	12"	"	576.40
Liberty st., southerly.....	29	12"	"	12.94
Charter avenue, Walnut street, easterly .....	527	12"	"	589.34 475.20
Cherrelyn ave., Phoenix ave., southerly.....	300	15"	"	410.62

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cherry lane, Mill river to Central street.....	398	18"	Clay	\$1,454.15
	434	15"	"	
	251	12"	"	
	295	10"	"	
Cherryvale avenue, Long Hill st. to Florentine gardens.	596	10"	"	15.74
Chester st., Hancock to Central street.....	330	8"	"	....
Chestnut st., Edwards street, southerly.....	575	12"	Cem.	\$579.02
Mattoon st., southerly.....	288	15"	"	319.69
Pearl to Mattoon st.....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st.....	143	1'-8"x2'-6"	"	599.51
Bridge to Worthington st..	480	2'-0"	"	....
Worthington to Taylor st...	60	18"	Cem.	291.17
	244	12"	"	
Lyman st. to B. & A. R. R..	134	18"	"	355.41
	72	12"	"	
Franklin st., southerly.....	500	12"	"	358.75
Franklin st., northerly.....	397	12"	"	294.14
Essex to Everett st.....	374	15"	"	586.72
Carew st., southerly.....	126	8"	Clay	100.68
Carew to Prospect st.....	424	24"	"	1,618.64
	537	20"	"	
Ringgold st., northerly.....	220	12"	Cem.	178.88
Prospect st., northerly.....	313	18"	"	406.00
Bancroft st., southerly.....	172	12"	"	123.00
	108	12"	Clay	190.55
	19	10"	"	
Bancroft to Montmorenci st.	391	15"	Cem.	535.24
Bancroft st. to Montmorenci st. (see Bancroft st.).....	....	3' 2"x4'-9"	Brick	....
Montmorenci to Waverly st.	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly.....	450	10"	"	385.61
Douglas to Springfield (see Springfield st.).....	....	3'-6"	Brick	....
Merwin st., southerly.....	178	10"	Clay	....
Eagle st., northerly.....	87	15"	"	....
Eagle st., southerly.....	171	10"	"	....
Chestnut st., I. O., Worcester to Hampden st. ....	342	15"	Cem.	8,427.65
	30	15"	Clay	
Hampden to Berkshire st...	307	15"	"	342.65
Church st., Garden brook to North st.....	556	18"	"	1,398.71
	80	15"	Cem.	
				738.16

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	\$84.12
	55	8"	"	6.89
Clarendon st., Worthington st., westerly.....	205	10"	"	225.80
Worthington to St. James ave.	336	18"	Cem }	1,855.39
St. James ave. to Sherman st.	885	12"	" }	
Clayton st., Phoenix avenue, southerly.....	398	15"	lay }	2,081.19
	253	12"	" }	696.54
Cleveland street, Armory to Liberty st .....	274	18"	" }	
	250	15"	" }	
	276	12"	" }	790.48
	284	10"	" }	
Clifford st., Bay st., northerly.	250	12"	" }	319.95
	119	10"	" }	
Clifton avenue, Central street, southerly.....	406	8"	"	82.10
Cliftwood ave., Sumner ave., southerly.....	464	10"	"	....
Clinton st.....	410	12"	Cem.	441.52
submerged outlet .....	176	24"	Wood }	2,207.90
	24	24"	C.Ir'n }	
Conn. river to Fulton st....	593	4'-10"x7'-3"	Brick }	
including Fulton st. from Clinton to Sargeant st....	1,080	4'-8"x7'-0"	"	
	42	4'-10"x7'-3"	"	
Sargeant st., Fulton to Carew street .....	920	4'-6"x6'-9"	"	26,137.87
Carew st., Main st. to Garden brook .....	250	4'-6"x6'-9"	"	
connection with Garden brook .....	32	5'-0"	"	
				28,787.29
College ave., State st. to Shat- tuck ave.....	839	12"	Clay	139.62
Shattuck ave., northerly....	175	12"	"	....
				139.62
College st., State st. to Wilbra- ham road .....	34	12"	" }	
	443	10"	" }	349.92
Collins st, Eastern avenue to Logan st.....	300	12"	" }	
	269	10"	" }	457.04
Colonial avenue, State street, southerly .....	326	12"	" }	
	348	10"	" }	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Colton st., Wilbraham road to Beacon st.....	448 569 658	18" 15" 12"	Clay " } " }	\$1,892.82
Columbia terrace, Liberty st., north and east .....	498	10"	"	
Columbus avenue, Forest Park ave., northerly.....	307	10"	"	
Commonwealth ave., Belmont ave. to Washington street..	441 500 549	24" 20" 18"	" } " } " }	2,878.00
Congress st., Garden brook to Main st.....	151 221	15" 12"	Cem. } " }	
Garden brook to Chestnut st.	133 198 369 288 119 76	20" 18" 15" 12" 15" 10"	Clay " } " } " } Cem. } " }	
Continental ave., Sumner ave., southerly.....	215 202	12" 10"	Clay } " }	2,268.66 27.45
Cook's ave., Worthington st. to N. Church ave..	117	15"	Cem.	
N. Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	" }	573.84
Cornell st., Dartmouth terrace to Wellesley st.....	185 374	15" 12"	Clay } " }	
Wellesley street., easterly..	186	10"	"	543.05
Princeton st., westerly.....	52	10"	Cem.	208.20
	86	8"	Clay	47.30
Princeton st., easterly.....	181	10"	Cem.	88.04
	120	10"	Clay	100.72
				149.53
				1,136.84
Court st., Water st., easterly...	273	12"	Cem.	226.15
Court Square ave., westerly.	431	12"	"	553.45
Main st. to Court Square ave.	200	12"	"	309.67
				1,089.27
Cortland street, State street. northerly .....	164 621	15" 12"	Clay } " }	672.01
Crosby st., Walnut st., westerly	321	10"	"	
Cross st., Main to Willow st...	388	18"	"	231.38
Willow st., easterly.....	363	12"	Cem.	878.12



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Crystal ave., Belmont avenue, easterly .....	251 250 298	15" 12" 10"	Clay " } "	  \$24.07
Cumberland st., Chestnut st., westerly .....	167	10"	"	\$125.29
North Main st., easterly ...	147	15"	"	182.77
Cypress street, Conn. river to Garden brook in Ferry st.	1,466	3'-4" x 5'-0"	Brick	308.06 13,629.35
Cypress avenue, Cypress street, northerly .....	360	12"	Clay	484.08
Dale st., northerly from sewer 60 ft. south of Hubbard ave	203	10"	"	157.30
Winthrop st., southerly ....	46	8"	"	18.08
				170.38
Dartmouth st., St. James ave. to Yale st. ....	973	3'-0" x 4'-6"	Brick } "	 8,247.06
Yale to Bowles st. ....	295	2'-6" x 3'-9"	"	
Dartmouth terrace, Worthing- ton st. to Cornell st. ....	499 357 177	20" 18" 15"	Clay " } "	 2,213.06
Dawes st., Bay st., southerly ..	229 380 518	15" 12" 10"	" } "	 165.40
Dawson avenue, White street, westerly .....	350	10"	"	95.87
Demond avenue, Fisk avenue, westerly .....	510 403	12" 12"	" } "	 608.57
Plainfield st., easterly .....	558	12"	Cem.	60.83
Dexter st., Knox to Pine st. ....	226	10"	Clay	245.10
Dickinson st., Mill st. to Sum- ner ave. ....	35 60 251 679 460 869 1,040 996	4'-6" cir. 2'-1" x 5'-0" 5'-0" cir. 4'-0" cir. 4'-10" x 7'-3" 4'-8" x 7'-0" 4'-4" x 6'-6" 4'-2" x 6'-8"	Brick " } " } " } " } " } " } "	  44,552.11
Sumner ave., southerly ....	1,379 324 434 812	2'-6" x 3'-9" 2'-4" x 3'-6" 2'-0" x 3'-0" 1'-10" x 2'-9"	" } " } " } "	 8,760.53
				53,312.64
Donald st., Birnie ave., easterly	315	10"	Clay	....
Dorchester st., St. James ave. to Amherst st. ....	364 238	12" 10"	" } "	 359.50

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Douglas st., B. & M. R. R. to North Main st. (see Row- land ave.).....	.....	.....	.....	.....
North Main to Chestnut st..	424	4'-6"	Brick	\$4,805.19
	442	4'-0"	"	
Dresden avenue, State street, southerly.....	359	12"	Clay	25.14
	321	10"	"	
Dwight st., Sanford to State st.	258	2'-8" x 4'-0"	Brick	\$1,571.86
Sanford to Harrison ave...	253	20"	Clay	1,441.27
	229	18"	"	
	199	15"	"	
Harrison ave., northerly....	100	15"	Cem.	144.41
Hillman st., southerly.....	226	10"	Clay	257.25
Hillman st., northerly.....	103	10"	"	388.28
Worthington st., southerly..	269	12"	"	433.91
Worthington st., northerly..	342	12"	Cem.	374.73
				4,611.71
Dymon st., Walnut st., easterly.	415	12"	"	385.92
Eagle st., North Main to Chest- nut st.....	643	15"	Clay	.....
East Court st., Dwight street, westerly .....	206	12"	"	303.10
	62	10"	"	
Eastern ave., Watershop pond to Manhattan st.....	1,164	24"	"	2,164.43
Manhattan to Alden st. . .	338	20"	"	636.21
Alden to Collins st.....	231	12"	"	313.99
Greene st., southerly.....	125	8"	"	69.58
Greene to Ladd st. ....	38	15"	"	27.25
Olive st., southerly.....	169	8"	"	119.57
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon st., northerly.....	194	12"	"	331.17
King st. to Chapel st. ....	152	10"	"	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly...	312	12"	Cem.	190.38
Tyler st., northerly.....	286	12"	"	181.30
Quincy st., northerly.....	118	10"	"	131.15
Monroe st., southerly.....	28	12"	"	45.09
	210	8"	Clay	179.00
Monroe st., northerly.....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
				5,038.44
Edwards st., Chestnut street, easterly .....	551	12"	Cem.	404.88
Elliott st., Salem st., southerly.	610	15"	"	730.48
	243	12"	"	309.08

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Elm st., submerged outlet.....	191	24"	Wood	\$1,700.79
Conn. river to Water st.....	26	24"	C. Iron	359.80
Water st. to Main st.....	385	3'-9" cir.	Brick	10,744.19
Elmwood st., Main to Hanover street .....	996	3'-8" x 5'-6"	" }	— \$12,804.78
	300	18"	Clay	
	249	15"	" }	707.66
	50	12"	" }	
Emery st., Boylston st., east and west.....	542	12"	Cem.	579.58
Essex street, Garden brook, westerly .....	418	15"	"	3 55.00
Garden brook to Chestnut st.	1,115	2'-2" x 3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
Essex st., I. O., Oak to Myrtle street .....	254	12"	Clay	7,815.43
	145	10"	" }	424.89
	281	10"	" }	210.09
				634.98
Everett st., Chestnut st. to brook brook to Cass st .....	323	15"	"	308.39
	926	15"	"	821.43
Cass st., easterly .....	....	....	....	104.35
				1,234.17
Euclid ave., Belmont ave. to Dickinson st.....	389	12"	" }	1,102.00
	741	10"	" }	
	77	8"	" }	50.67
Dickinson st., westerly.....	350	15"	" }	773.10
	350	12"	" }	
Dickinson st., easterly.....	275	10"	" }	307.83
				2,233.60
Fairbanks place, Worthington st., northerly .....	249	10"	"	220.66
Fairfield street, Litchfield to Garfield st.....	376	12"	"	....
	556	10"	"	351.64
Federal st., Worthington to Pearl st.....	567	12"	Cem.	740.92
Summer st., southerly.....	274	10"	Clay	172.00
				912.92
Ferry st., Main to Garden brook (see Cypress st.).....	....	....	....	....
Garden brook to Chestnut st.	1,168	2'-4" x 3'-6"	Brick	5,417.12
Firglade ave., Summer ave. to Spruceland st.....	350	10"	Clay	5,417.12
	270	8"	" }	46.01
Spruceland to Pineywoods avenue.....	447	10"	"	....
		8"	"	46.01

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fisk ave., Rowland to Worcester ave.....	272	24"	Clay	\$1,073.11
	275	20"	"	
	298	10"	"	
Wason ave., southerly.....	299	24"	"	1,216.81
	294	20"	"	
	248	12"	"	
Florence st., Pine st., easterly.	824	15"	Cem.	2,068.95
	651	12"	"	
	283	10"	"	
Hancock st., easterly.....	283	10"	"	303.15
Florentine gardens, Piney-woods ave., northerly.....	421	10"	Clay	2,372.10 22.83
Florida street, Worthington to Ingersoll grove st.....	273	15"	"	359.06
	561	12"	"	523.88
Worthington to St. James ave	935	2' 2" x 3' 3"	Brick	4,499.10
St. James ave. to Bay st....	599	24"	Clay	1,832.21
Forest st., Belmont ave. to Forest Park ave.....	419	12"	"	7,214.35
	255	10"	"	651.93
Forest Park ave., Fort Pleasant ave. to Garfield st.....	1,081	24"	"	....
	325	20"	"	1,217.48
	562	18"	"	
Sumner ave., northerly.....	567	12"	"	123.15
Sumner ave., southerly.....	66	10"	"	....
	438	10"	"	318.29
Pineywoods ave., northerly.	380	10"	"	33.87
				1,692.79 638.43
Fort st., Main to Water st....	633	12"	Cem.	
Fort Pleasant ave., Mill river to Sumner ave.....	888	2' 4" x 3' 6"	Brick	13,339.80
	1,825	2' 0" x 3' 0"	"	
	428	12"	Clay	
Mill st., southerly.....	428	12"	Clay	293.42
Franklin street, Garden brook sewer to Main st.....	434	18"	Cem.	18,633.22
Garden brook sewer to Chestnut st.....	469	18"	"	1,834.76
	735	15"	"	
	273	15"	Clay	
Chestnut to Charles st.....	670	12"	"	303.37
Charles st., easterly.....	670	12"	"	471.99
Cass st. to Webster st.....	621	12"	"	684.32
	70	10"	"	
Nursery st., westerly.....	207	15"	"	....
Nursery st. to Genesee st...	107	15"	"	199.93
	557	15"	Cem.	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fremont st., Main to Water st.	780	1'-6" x 1'-7"	Brick	\$702.45
Main st., westerly.....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				<hr/> \$1,424.25
Fulton st., Cypress to Clinton st.	882	12"	Cem.	826.66
Clinton st., northerly.....	829	15"	"	1,138.56
John st., northerly.....	314	12"	Clay }	674.48
	401	10"	" }	<hr/>
Garden brook sewer (see private ways).				2,639.70
Gardner ave., Gardner street, northerly.....	151	8"	"	73.11
Gardner st., Hanover to Water street .....	655	2'-0" x 3'-0"	Brick	1,995.23
Water to Main st.....	400	12"	Cem.	518.97
				<hr/> 2,514.20
Garfield st., Forest Park ave., easterly .....	556	15"	Clay }	967.16
	514	12"	" }	
Belmont ave., westerly.....	531	10"	"	329.87
				<hr/> 1,297.03
George st., Dexter st., southerly	409	10"	"	332.45
Girard ave., Bay st. to McKnight st.....	947	12"	"	711.13
Gordon st., Pasadena ave. to White st. ....	618	15"	"	555.79
Grace st., Birnie ave., easterly.	274	15"	Cem.	51.56
Grand ave., Revere st., easterly	250	15"	Clay }	
	252	12"	" }	....
Revere st., westerly.....	151	10"	"	....
				<hr/> ....
Grant st., Magazine to Armory street. ....	588	12"	Cem.	439.38
Granville st., Eastern ave. to Logan st.....	495	12"	"	519.02
Gray's avenue, Cypress avenue, northerly .....	495	12"	"	421.06
Greene st., Hancock to Eastern ave.....	610	18"	" }	1,754.35
	793	15"	" }	
Green lane, Rimmon avenue, westerly and northerly...	744	12"	Clay	....
	143	10"	"	....
				<hr/> ....
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	"	133.60
Greenwich st., Becket street, easterly.....	300	12"	" }	
	300	10"	" }	467.79

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Greenwood st., Garden brook to Main st.....	386	12"	Cem.	\$2,231.69
Garden brook, easterly.....	538	15"	Clay	
	113	12"	"	
	452	12"	Cem.	
Grenada terrace, Dickinson st. to Ventura ave.....	220	18"	Clay	708.45
	310	15"	"	
Grosvenor st., North to Chestnut street.....	131	18"	Cem.	686.55
	648	15"	"	
Grove st., North Main street, easterly.....	409	10"	Clay	442.65
North st., westerly.....	270	10"	"	
Grover street, Armory street to Liberty st.....	300	18"	"	898.06
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dick- inson st.....	500	12"	"	617.91
	474	10"	"	
Hampden st., Water street to Main st.....	569	15"	Cem.	711.90
Hampden st., I. O., Chestnut st., easterly.....	285	12"	"	\$187.28
	174	12"	Clay	299.12
Holly st., easterly.....	150	10"	"	128.67
Hampshire st., I. O., Oak st., westerly.....	300	12"	"	633.59
	398	10"	"	
Oak st. to Myrtle st.....	250	12"	Cem.	206.20
Myrtle st., westerly.....	300	10	Clay	278.62
				1,118.41
Hancock ave., Hancock street, westerly.....	520	10"	"	531.80
Hancock street, Mill river to Central st.....	920	12"	"	866.30
Central to Walnut st.....	218	18"	Cem.	1,759.06
	1,343	15"	"	
Walnut to Alden st.....	122	12"	"	88.00
Lebanon to Alden st.....	827	2'-0" x 3'-0"	Brick	5,009.61
Walnut (through Lebanon) to Quincy st.....	1,852	3'-6" x 5'-3"	"	21,668.02
Quincy to State st.....	913	3'-4" x 5'-0"	"	
				29,390.99
Hanover st., York st. to Gard- ner st.....	830	2'-2" x 3'-3"	"	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
let st., North Main st. to North st.....	250 207	15" 12"	Clay } "	\$377.17 172.92
North st., easterly.....	330	10"	"	
ison ave., Main st. to Chestnut st.....	600 250	15" 8"	Cem. Clay	874.11 203.61
ard st., Yale to St. James ave .....	316 300 291	18" 15" 12"	" } "	967.94 266.84
James ave. to Cornell st.. ley st., Wilbraham road to Monroe st.....	736 181 330	12" 12" 10"	" } "	25.66 40.40 211.65
			Clay	252.05
thorn st., Hancock street, westerly.....	441	12"	Cem	445.87
len st., State st., northerly.	335 299	12" 10"	Clay } "	24.11
on st., North to Chestnut st. ory st., Mill river intercept- ing sewer to Alden st....	222 663 754 228 184 788	8" 12" 20" 18" 15" 12"	" } "	492.56 2,417.78
street, Maple street to ngraham ave.....	523 567 550	18" 15" 12"	" } "	1,958.92
raham ave., easterly....	846	12"	"	945.32
an st., Main to Dwight st.	350 380	15" 12"	" } "	2,904.24 1,436.30
de place, Richelieu street, asterly .....	106	8"	"	....
st., I. O., Worcester to lampden st.....	377	15"	"	419.11
oke st., Main st., westerly.	734	12"	Cem.	928.06
er st., State st., southerly.	31 370	12" 10"	Clay } "	62.58
er street, North Main st. North st. ....	444 255	10" 10"	Cem. Clay	39.04 ....
re st., Dickinson street. ortherly.....	363 411	12" 10"	" } "	39.04 783.12

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Howard st., Main st., westerly.	344	15"	Clay	\$799.34
	321	12"	"	
Water st., easterly.....	312	12"	Cem.	289.14
Water st., westerly.....	350	12"	"	364.47
				\$1,452.95
Hubbard avenue, Main street, easterly.....	257	15"	Clay	630.47
	321	8"	"	
Hunt terrace, Allen street, northerly.....	304	10"	"	....
Huntington st., Becket street, easterly.....	300	12"	"	416.95
	300	10"	"	
Ingersoll grove, Worthington st., northerly.....	782	12"	Cem.	1,003.05
	218	8"	Clay	
Bowdoin st., easterly.....	132	10"	"	106.53
Irvington ave., Sumner ave., southerly.....	300	12"	"	1,109.58
	100	10"	"	
Jackson street, Sumner ave., southerly.....	460	10"	"	56.78
	140	8"	"	
Pineywoods ave., northerly.	281	10"	"	56.78
James st., Cedar st., northerly.	289	15"	Cem.	924.38
	534	12"	"	
Jefferson ave., North Main st. to Chestnut st.....	414	12"	"	492.50
See private ways also.	299	20"	Clay	1,663.86
	299	18"	"	
	276	15"	"	
	60	12"	"	
	78	6"	"	37.89
				2,194.25
John st., Fulton to Plainfield st.	652	12"	Cem.	383.84
Johnson st., Dickinson st. to Pasadena ave.....	1,904	18"	Clay	3,756.87
Keith st., Belmont ave. to Dickinson st.....	551	12"	"	1,018.18
	551	10"	"	
Kensington ave., Oakland st., easterly.....	320	18"	"	493.42
Kenwood Park, Belmont ave., northerly.....	130	12"	"	139.96
	1,127	10"	"	
Kibbe ave., Summer st. to Worthington st.....	260	18"	"	552.92
King st., Walnut to Hancock st.	504	15"	Cem.	
	441	12"	"	



SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
King st., Hancock to Eastern avenue.....	710	18"	Cem. }	\$1,808.75
	686	15"	" }	
Eastern ave. to Logan st....	405	12"	" }	72.72
	72	10"	Clay }	
Knox st., Mill river to Wind- sor st.....	1,115	15"	Cem. }	\$2,802.84
	198	12"	" }	
Ladd st., Eastern ave. to Logan st ..	243	15"	Clay }	424.92
	304	12"	" }	
Lafayette st., St. James ave. to Amherst st .....	582	12"	" }	514.86
	21	10"	" }	
Laurel ave., Conn. river to Plainfield st .....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	2,370.58
Lebanon st. (see Hancock) ..	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly.....	158	2'-0" x 3'-0"	"	1,495.77
Hancock to Eastern ave ...	606	18"	Cem. }	1,701.28
	816	15"	" }	
Lenox street, Sumner avenue. southerly.....	465	10"	Clay	3,197.05
Lexington ave., Chestnut st. to Massasoit st.....	668	12"	"	32.91
Leyfred terrace, Belmont ave.. northerly .....	300	18"	" }	957.30
	317	15"	" }	
Liberty st., Garden brook to Main st .....	118	12"	"	179.19
	70	1'-6" x 1'-7"	Brick	1,036.34
	172	12"	Cem.	
Garden brook to Chestnut st.	967	15"	"	
	171	8"	"	
Chestnut to Webster st.....	784	2'-4" x 3'-6"	Brick	9,123.49
	659	1'-10" x 2'-9"	"	
	684	2'-2" x 3'-3"	"	5,383.15
Webster to Armory st.....	366	3'-0" x 4'-6"	"	
	1,282	2'-2" x 3'-3"	"	2,539.81
	317	1'-10" x 2'-9"	"	
	449	2'-2" x 3'-3"	"	3,126.37
Armory to Grover st.....	1,194	24"	Clay	
	616	18"	"	21,388.35
Lillian st., Oak st., easterly. .	297	12"	"	
Lincoln st., Magazine street to Federal st.....	823	12"	"	232.47
				676.54

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Linden st., Chestnut to Cass st.	470	18"	Cem. }	\$1,254.55
	862	15"	" }	
Litchfield st., Belmont ave. to Fairfield st. ....	159	15"	Clay	\$335.11
Garfield st., northerly.....	69	6"	"	7.10
				342.21
Locust st., York to Mill st....	84	3'-0" x 4'-6"	Brick }	6,804.18
	364	2'-9" x 4'-11"	" }	
	686	2'-6" x 3'-9"	" }	
Logan st., Ladd st., northerly.	88	10"	Clay	67.64
Granville st., northerly.....	200	10"	"	147.48
				215.12
Lombard st., Water st., easterly	500	12"	Cem.	344.69
Long Hill st., submerged outlet.	26	18"	Clay	5,387.70
	290	18"	Wood }	
	28	18"	C. I. }	
	1,310	24"	Clay }	
Conn. river., easterly.....				2,086.09
Long Hill st. and Washington avenue, from 24" pipe to Magnolia terrace.....	650	2'-4" x 3'-6"	Brick }	6,969.65
	823	2'-2" x 3'-3"	" }	
Long Hill st., Washington ave., northerly.....	399	15"	Clay }	953.28
	185	12"	" }	
	487	10"	" }	
Sumner ave., southerly. ....	356	8"	"	386.61
Warner pl. to Sumner ave..	423	10"	"	379.51
				16,162.84
Loring st., Water st., easterly.	650	12"	Cem.	750.93
Lowell street, Conn. river to Plainfield st. ....	305	18"	Clay }	986.21
	396	15"	" }	
	396	12"	" }	
	283	10"	" }	
Lyman st., Main to Chestnut st.	1,335	2'-0" x 3'-0"	Brick	6,113.12
Chestnut to Spring st....	720	15"	Cem.	1,655.26
				7,768.38
Lyons st., I. O., Main street, northerly .....	261	18"	Clay	352.96
Madison avenue, Central street, northerly.....	250	12"	" }	737.57
	287	10"	" }	
Magazine st., Worthington to Lincoln st.....	682	18"	Cem. }	1,103.19
	249	15"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Magnolia terrace, east side, Summer ave. to Spruceland ave.	586	8"	Clay	\$121.21
Spruceland ave. southerly..	90	8"	"	
west side, Summer ave. to Spruceland ave.....	622	8"	"	
overflow connection between east and west side.....	62	8"	"	
Washington ave. to Spruceland ave.....	362	24"	"	26.00
	602	12"	"	....
Main st., including cost of parts in Carew and Franklin sts.	523	12"	Cem.	944.47
Sargeant st. to Emery st....	341	24"	Clay	\$147.21
	442	20"	"	
	480	18"	"	
	186	15"	"	
Locust st., southerly.....	800	15"	"	2,539.81
York to B. & A. R.R.....	56	7'-0", cir.	Brick	1,430.27
	1,772	6'-6", cir.	"	20,812.99
	906	5'-6", cir.	"	
	990	5'-0", cir.	"	
	1,624	3'-4" x 5'-0"	"	
	864	2'-4" x 3'-6"	"	34,453.56
	263	12"	Clay	164.82
Main st., I. O., Chicopee river to Pine st.....	2,321	2'-4" x 3'-6"	Brick	60,345.92
Pine to Cedar st.....	500	18"	Cem.	7,636.81
	185	15"	"	870.78
	103	12"	Clay	128.49
Cedar to Lyons st.....	1,110	2'-0" x 3'-0"	Brick	5,024.19
Lyons st., easterly.....	205	24"	Clay	1,334.58
	245	18"	"	
	129	12"	"	
	542	15"	"	
Malden st, Allen st., southerly	291	12"	"	14,994.85
	494	10"	"	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	"	826.79
	645	12"	"	
	205	10"	"	
	315	18"	"	
Maple st., State to Temple st..	315	18"	"	675.51
	....	....	....	51.55
Park to High st.....	225	18"	"	505.21
Union st., southerly.....	515	18"	Cem.	959.13
	135	12"	"	
Central st., southerly.....	33	18"	"	160.95
	338	12"	"	
Pine st., northerly.....	195	15"	"	1,592.00
	850	12"	"	
				3,944.35

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Mapledell street, State street, northerly .....	337	15"	Clay	\$70.80
	300	12"	"	
	346	10"	"	
Maplewood ter., Fort Pleasant ave., easterly .....	682	15"	"	22.21
	329	12"	"	
	178	10"	"	
Marble st., Main st., easterly..	222	18"	Cem.	1,178.97
	586	15"	"	
	242	12"	"	
Marengo Park, Belmont ave., easterly .....	443	15"	Clay	....
	612	12"	"	
	778	10"	"	
Margaret st., Water st., westerly	520	12"	Cem.	\$507.30
Water st., easterly .....	858	12"	"	801.44
				1,308.74
Marion st., Bay st., southerly..	833	12"	Clay	795.45
Chapin st., easterly .....	94	10"	"	25.89
	319	8"	"	
				821.34
Market st., State st., northerly	119	10"	"	.....
Sanford st., southerly .....	200	12"	"	412.04
Sanford st., northerly .....	549	15"	Cem.	687.65
Harrison ave., southerly...	154	12"	"	154.47
				1,254.16
Massachusetts ave., Wilbraham road, southerly .....	300	15"	Clay	953.68
	300	12"	"	
	227	10"	"	
Massasoit place, Massasoit st., easterly .....	381	12"	"	....
Massasoit street, Carew street, northerly .....	709	12"	Cem.	547.51
Lexington ave., southerly...	300	12"	Clay	258.56
	250	10"	"	
Montmorenci st., southerly..	233	10"	"	168.93
Montmorenci st., northerly.	152	10"	"	92.94
				1,067.94
Mattoon street, Chestnut to Salem st. ....	356	1' 4"x2'-0"	Brick	688.50
	87	15"	Cem.	
Maynard st., State st. to Shattuck ave. ....	431	15"	Clay	607.82
	400	12"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
McKnight st., Catharine to Sherman st.....	255	15"	Cem.	\$421.42
	30	15"	Clay	56.78
Catharine to Bowles st....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles street to Girard ave.	119	12"	Cem.	81.85
	263	10"	Clay	233.51
Mechanic street, Water street, westerly.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
Medford street, Birnie avenue, easterly.....	390	12"	"	245.55
	183	10"	"	367.29
Melrose st., Marshall place and Cottage ave.....	342	18"	"	....
	263	15"	"	....
	74	12"	"	....
	772	10"	"	1,345.66
	592	8"	"	....
Merrick avenue, King street, southerly .....	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut st.....	774	15"	Clay	....
Mill river intercepting sewer, Mill river to Locust st...	370	5'-3"	Brick	6,066.64
	691	4'-0"	"	....
Locust st. to Hickory st....	587	4' 0", cir.	"	....
	131	3'-6" x 5'-3"	"	....
	1,748	5' 9", cir.	"	42,706.00
	779	4'-3", cir.	"	....
	1,611	3'-3", cir.	"	....
in Mill and Hickory sts ..	833	2'-2" x 3'-3"	"	9,355.23
Hickory st. to Gunn square brook by northerly shore of watersheds pond.....	4,495	2'-2" x 3'-3"	"	43,391.49
				101,519.36
Mill st., Main st., easterly....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-6" x 3'-9"	Brick	4,764.79
Monmouth st., Dorchester st., northerly and easterly....	199	12"	Clay	218.15
	171	10"	"	121.75
Yale st., westerly.....	64	12"	"	45.95
	278	10"	"	281.47
Berkeley st., northwesterly..	350	12"	"	235.62
Monroe st., Hancock to East- ern ave .....	611	18"	Cem.	902.94
	789	15"	"	1,840.52
Eastern ave. to Colton st..	316	12"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Monson avenue, Greene street, northerly .....	200	8"	Clay	....
Montmorenci st., Chestnut to Massasoit st. ....	676	12"	"	\$790.32
Montrose st., State to Burr st. .	338	15"	"	75.74
	217	12"	"	
	329	10"	"	
Morgan st., Garden brook to Main st. ....	252	2"	Cem.	\$199.08
Garden brook to North st. .	25	8"	"	48.07
	8	8"	Clay	20.72
	626	18"	"	1,439.59
				1,707.46
Morris st., Main st., easterly ..	915	2'-0" x 3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
				3,301.90
Mountainview st., Forest Park ave., northerly .....	297	12"	Clay	....
	297	10"	"	
Mulberry st., Maple st., easterly and northerly .....	687	15"	Cem.	1,246.18
	629	12"	"	
	246	10"	Clay	
west from Ridgewood ter- race .....	144	15"	"	....
Murray Hill ave., Liberty st., northerly .....	....	....	Clay	1,479.77
Myrtle st., Card Factory Pond brook, northerly .....	107	10"	"	69.76
	237	8"	"	
Myrtle st., I.O., Mainto Worcester	377	24"	"	1,003.44
Worcester st., southerly ....	378	10"	"	353.34
Berkshire st., southerly ....	180	10"	"	189.63
Hampshire st., southerly ...	126	10"	"	100.99
				1,649.40
Nelson avenue, Greene street, northerly .....	90	12"	Cem.	27.96
Lebanon st., northerly .....	188	10"	"	126.54
				154.50
Nelson street, Nursery street, easterly .....	308	24"	Clay	....
New st., E. Court st., northerly	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Dwight st., westerly .....	164	10"	"	203.79
				430.99
Newman st., Knox st., westerly	175	12"	Cem.	11.49
Norfolk st., Wilbraham road, southerly .....	300	15"	Clay	566.08
	300	12"	"	
North st., Carew st., northerly.	190	8"	Cem.	84.88
Church to Grosvenor st. ....	68	18"	"	157.13
Morgan to Ringgold st. ....	198	18"	"	....
Osgood to Hebron st. ....	130	18"	Clay	....
	165	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
North st. Bancroft st. southerly	302	18"	Clay	\$411.55
Bancroft st., northerly.....	153	12"	Cem.	114.54
Jefferson ave., northerly....	233	8"	Clay	177.12
Calhoun st., northerly. ....	256	8"	"	48.13
Waverly to Grove st.....	362	12"	"	302.86
Harriet st., southerly.....	86	8"	"	....
Northampton ave., Wilbraham road, southerly.....	1,101	12"	"	\$2,079.90 830.79
North Church ave., Cook's ave., easterly .....	209	10"	Cem. }	....
Cook's avenue, westerly (for cost see Cook's ave.)...	133	10"	" }	....
No. Main st, Morgan st, southerly	232	8"	Clay	171.18
Morgan st., northerly.....	173	8"	"	90.69
Arch to Osgood st.....	730	15"	Cem.	713.66
Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st...	359	24"	Clay	....
	420	20"	" }	2,568.01
	285	15"	" }	....
Grove st., northerly.....	170	12"	"	226.45
Douglas to Harriet st.....	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st.....	250	24"	Clay	470.75
Douglas to Eagle st.....	326	2'-4"x3'-6"	Brick	....
	272	1'-10"x2'-9"	" }	1,840.24
Eagle st., northerly.....	142	24"	Clay	449.66
Wason ave., southerly .....	215	2'-0"x3'-0"	Brick	860.00
Wason ave., northerly.....	348	12"	Clay	281.41
Norwood st., Main to Hanover st.	1,051	12"	Cem.	10,520.67
Nursery st, Liberty to Franklin st.	694	2'-8", cir.	Brick	1,069.55
Franklin st., northerly.....	587	2'-8", cir.	"	....
				2,284.52
Oak st., Union to State.....	717	18"	Cem.	880.48
Union to Tyler st.....	220	18"	Clay	....
	268	15"	" }	752.00
Walnut st. to Tyler st.....	158	18"	Cem.	280.65
				1,913.13
Oak st., I. O., north from Main	179	15"	"	....
	171	12"	" }	637.00
Main st., southerly .....	590	2'-2"x3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
Hampshire st., southerly...	285	18"	"	....
	300	15"	" }	1,562.43
	400	12"	" }	6,198.06
Oak Grove ave, State st, northerly	349	18"	"	....
	327	15"	" }	....
	158	12"	" }	....
	256	12"	" }	....
Oakland st., Dickinson st. to Belmont ave., .....	895	24"	"	2,218.71

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oakland street, Dickinson to Orange street.....	254 350 170 218	24" 18" 12" 8"	Clay " } " } " }	\$1,619.20 110.79
Allen to Orange street.....	625 304 193 404	18" 15" 12" 10"	" } " } " } " }	1,428.06 \$5,376.76
Olive st, Eastern ave. to Logan st.	540	10"	"	400.76
Orange st., Highland st., easterly	583	8"	"	
White st., westerly.....	381 649	12" 10"	" } " }	961.35
White st., easterly.....	699	10"	"	
Orchard st., Plainfield street, westerly.....	325 301 297 140	20" 15" 12" 10"	" } " } " } " }	1,015.67
Orleans court, Orleans street, westerly.....	205	8"	"	....
Orleans st., Union st., northerly.	39 310 330	12" 12" 10"	Cem. Clay } " }	36.23 456.19
Tyler st., northerly .....	188	10"	Cem.	187.74
Fendleton ave., northerly..	231	12"	"	327.73
Ormond st., Belmont to Sum- ner ave .....	275	10	Clay	252.85
Osgood st., Garden brook to	257	12"	Cem. }	1,544.57
Main st.....	588	18"	" }	174.87
Garden brook to North st.,	92	18"	Clay	1,719.44
Oxford st., Riverview terrace, northerly .....	63	12"	Clay	....
Ozark street, Grand avenue, southerly.....	456	10"	"	23.58
Palmer avenue, Locust street, easterly .....	351 337 14	18" 15" 12"	" } " } Cem.	1,165.79 1,165.79
Park st., Main to Willow st. .	353	18"	"	419.95
	42	18"	Clay	171.59
Willow to Maple st.....	200 557	24" 18"	" } " }	1,431.05



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Parker st., I. O., Chicopee river to Main st.....	32	24"	Clay	\$261.81
	221	12"	"	
Main st., southerly .....	1,098	24"	"	
Loon pond to B. & A. R. R.	1,227	12"	"	
				\$3,988.48
Parkwood st., Sumner avenue, southerly .....	419	10"	"	70.08
Pasadena avenue, White street, southerly.....	156	12"	"	258.61
	291	10"	"	
Pasco street, I. O., Essex street, southerly .....	724	10"	"	607.80
Patton st., Garden brook to Main st.....	214	10"	"	173.73
Garden brook, easterly.....	352	18"	"	1,572.67
	349	15"	"	
	537	12"	"	
				1,746.40
Peabody lane, Willow street, westerly .....	216	10"	"	234.47
Pearl st., Chestnut to Spring st.	514	24"	"	1,792.62
	447	20"	"	
Spring st., easterly.....	190	...	Brick	96.16
				1,888.78
Pendleton ave., Walnut st. to Hancock st.....	287	18"	Cem.	1,603.16
	524	15"	"	
	429	12"	"	
Hancock st. to Eastern ave.	600	18"	"	1,395.98
	793	15"	"	
				2,999.14
Phoenix avenue, Liberty street, easterly.....	236	18"	Clay	840.32
	250	15"	"	
	89	10"	"	
Pine st., Mill to Cedar st.....	740	2'- 6"x3'-9"	Brick	13,659.54
	1,529	3'- 6"x5'-3"	"	
	500	3'-10"x5'-9"	"	
Cedar to Walnut st.....	62	18"	Cem.	1,665.54
	884	15"	"	
	631	12"	"	
Pine st., I. O., Main st., easterly	1,896	24"	Clay	15,325.08
Pine st. court, Pine st., easterly.	348	10"	Cem.	4,170.03
Pineywoods avenue, Washing- ton ave., northeasterly....	334	15"	Clay	266.39
	263	12"	"	....
Magnolia terrace, westerly..	350	10"	"	....
Magnolia terrace to Jackson st	343	20"	"	....
	404	12"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Pineywoods ave., Jackson st to Forest Park ave.,.....	341	12"	Clay	....
Plainfield st., Sargeant st. to Fulton st.....	414 537 456 244	18" 15" 12" 0"	" " " "	....
Washburn st., southerly....	122	2"	Brick	129.78
Washburn to Orchard st. . .	331	2' 4" x 4' 0"	"	1,555.00
Orchard to Newland st.....	303	2' 4" x 3' 9"	"	2,367.93
Newland to Roseland st....	287	2' 4" x 3' 6"	"	4,518.58
	294	2' 2" x 3' 3"	"	
Rowland ave. to Talcott st.	288	24"	Clay	1,208.95
	299	20"	"	
Talcott ave., northerly.....	216	10"	"	158.46
Wason ave. to Demond ave.	304	24"	"	
	249	20"	"	1,253.59
	53	18"	"	\$13,717.42
Pleasant st., Bay st., southerly.	296	12"	Cem.	249.74
Plymouth st., Fulton st., easterly	375	10"	Clay	196.39
Pomona ave., Sumner avenue, northerly .....	580	12"	"	459.94
Portland st., Birnie ave., easterly	251	12"	"	351.35
	224	10"	"	
*Portsmouth street.....				40.59
Potter place, State st., northerly	396	15"	"	
	301	12"	"	....
	274	10"	"	
Prince st., King to Lebanon st.	329	12"	Cem.	333.15
Princeton st., Bay to Amherst st.	103	18"	"	289.08
	689	18"	Clay	724.15
	151	15"	"	177.72
Yale to Vassar st.....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	"	195.52
Private ways:				1,386.47
Armory Hill sewer from Ar- mory st., through private grounds east of Armory st. to Worthington st.....	150 900 249	2' 5" x 3' 7 1/2" 2' 8" x 4' 0" 2' 1" x 3' 1 1/2"	Brick " "	5,318.04
Card-factory Pond, Wood- worth ave., westerly be- tween High and State st. in front and around High school.....	751 492	12" 24"	Cem. Clay	408.75 848.26
High school to State st....	88	24"	"	

\*Incomplete.

SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cemetery brook, Morris st., easterly, north of Central street.....	174	24"	Clay	\$569.59
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st.....	2,936 766 1,303 236	5'-6", cir. 5'-0", cir. 4'-6", cir. 3'-0" x 4'-6"	Brick " } " } " }	\$47,577.34
Worthington st., northeast- erly to Lyman st., thence via Railroad land to Ar- mory st.....	3,274 952	4'-7 1/2", cir. 4'-1", cir.	" } " }	29,761.32
Jefferson ave., passage way in rear of lots on south side.	135 518	2'-0" x 3'-0" 12"	" Cem.	..... 364.84 364.84
Private way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	402.70
Sewer in ave., Hampden st., southerly, near Water st.	111	12"	Cem.	147.14
Sewer Main st. to Dale st. between Hubbard avenue and William st.....	655	12"	"	441.92
Springfield st. and Glenwood, via Atwater Glen.....	677 598 389 1,292 40 16 1,294	3'-6", cir. 3'-3", cir. 4'-3", cir. 3'-0", cir. 2'-0", cir. 2'-10" x 4'-3" 24"	Brick " } " } " } " } " } Clay	14,614.89
Prospect st., Chestnut street, easterly.....	218 199 196	18" 15" 12"	" } " } " }	3,889.98 18,504.87
Pynchon st.....	950	2'-0" x 3'-0'	Brick	3,108.02
Queen st., Walnut to Hancock st.	634	12"	Cem.	594.68
Quincy st., Oak to Stebbins st.	860	12"	"	619.96
Hancock to Stebbins st....	522	12"	"	549.58
Hancock to Eastern ave....	637 765	18" 15"	" } " }	1,598.58
Colton to Eastern ave....	208	10"	Clay	156.87
Railroad st., Waterst., easterly	351	12"	"	2,924.99
Randolph street, Maplewood terrace, easterly.....	250 251	12" 10"	" } " }	490.75

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Raymond ave., Carew street, northerly.....	277	10"	Clay	\$217.32
Reed st., State st., southerly..	219	12"	"	28.74
	309	10"	"	
Revere st., White st., southerly.	750	20"	"	
	250	10"	"	23.32
	209	8"	"	
	160	12"	"	
Richelieu court, Adams st., southerly.....	260	10"	"	452.29
Richelieu place, Richelieu st., easterly.....	100	8"	"	
Ridgewood place, Mulberry st., northerly.....	400	12"	"	
Rimmon ave., Green lane to Weaver Ramble.....	859	18"	"	29.46
Ringgold st., north to Chest- nut st.....	117	18"	Cem. }	681.73
	632	12"	" }	
Ripley ave., St. James avenue, southerly.....	230	10"	"	163.48
Riverview st., Riverview ter- race, northerly.....	63	10"	Clay	....
Forest Park ave., southerly.	299	10"	"	217.39
Riverview terrace, Fort Pleas- ant ave., easterly.....	298	15"	"	....
	322	12"	"	
	105	10"	"	
Roseland st., Plainfield street, westerly.....	350	18"	"	1,352.31
	350	15"	"	
	173	12"	"	
Rowland ave., Conn. river to North Main st., including 630' in Douglas st.....	579	5'-3", cir.	Brick }	32,489.36
	51	1'-8" x 2'-6"	"	
	1,247	6'-6", cir.	"	
	1,330	6'-0", cir.	"	
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge avenue, Main street, easterly.....	574	24"	"	49.43
Salem st., Pearl st., south and east.....	283	18"	Cem. }	804.72
	99	15"	"	
	290	12"	"	
Sanford st.....	536	3'-2" x 4'-9"	Brick	4,014.47
School st., Union to Mulberry street.....	549	15"	Clay	\$620.95
Union st., northerly.....	262	10"	"	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Seventh st., Fulton to Main st. Sewer in avenue (see private ways). Sewer (see private ways).	830	12"	Cem.	\$661.03
Sheldon st., Becket to North Main st.....	42	10"	Clay	43.87
Sharon st., Garden brook to Main st.....	360	15"	Cem.	\$762.77
Garden brook, easterly.....	601	18"	"	1,211.18
	463	12"	" }	1,973.95
Shattuck ave., Maynard ave. to Willard ave .....	200	10"	Clay }	....
	143	8"	" }	....
Willard ave., easterly.....	50	8"	"	....
Sherman st., Bay to Clarendon st.	175	12"	Cem. }	571.12
Bay to McKnight st.....	443	12"	" }	
State to McKnight st .....	301	18"	Clay }	1,314.14
	301	15"	" }	
	544	12"	" }	1,885.26
Silver st., Armory st., easterly.	302	15"	" }	
	297	12"	" }	470.93
Smith st., Knox to Dorne st..	200	12"	Cem.	27.26
Sorrento ave., Sumner avenue, northerly .....	82	6"	Clay	7.49
Spring st., south from Lyman st.	281	15"	Cem. }	
	130	12"	" }	
Worthington to State st....	470	18"	" }	2,479.25
	640	15"	" }	
	644	12"	" }	
Worthington st., northerly..	132	12"	Clay	87.28
Worthington to Summer st.	183	5'-0"	Brick }	1,498.24
	49	4'-3" x 6'-0"	" }	4,064.77
Springfield st., Atwater ter- race, northerly.....	892	20"	Clay }	1,988.87
	209	18"	" }	.....
	236	8"	" }	1,988.87
Springfield st., and Glenwood (see private ways.) Spruce street, Central street, northerly .....	600	12"	Cem.	558.03

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Spruceland avenue, Magnolia terrace, westerly.....	67	8"	Clay	....
Beechwood ave., easterly...	242	8"	"	\$136.48
Beechwood ave., westerly..	648	8"	"	....
continued to Long Hill st...	93	8"	"	153.52
Stafford street, Armory street, westerly .....	402	10"	"	\$290.00
State st., Water st., westerly..	152	12"	Cem.	210.53
	91	12"	"	45.27
Water st. to Main st.....	907	18"	"	71.19
Main to Dwight st.....	636	18"	"	1,167.64
Dwight st. to High school..	29	2'-8"x4'-0"	Brick	1,433.50
	265	2'-2"x3'-3"	"	4,897.66
	417	2'-0"x3'-0"	"	
At High school, connecting old with new .....	54	24"	Clay	161.88
High school to Oak street, near top of hill.....	2,682	2'-0' cir.	Brick	4,099.53
Repairing front of Benton park.....	505	18"	Cem.	708.18
	130	12"	Clay	212.78
Oak to Buckingham st....	2,110	18"	Cem.	2,590.03
Hancock to Sherman st....	1,147	3'-4"x5'-0"	Brick	13,555.85
Sherman to Chapin st.....	492	3'-0"x4'-6"	"	
Chapin st. to Andrew st....	726	3'-0"x4'-6"	"	10,793.96
Andrew st. to Oak Grove ave.....	937	2'-10"x4'-3"	"	
east from Oak Grove ave. to Courtland st.....	548	2'-4"x3'-6"	"	5,042.79
	283	2'-2"x3'-3"	"	
	352	2'-0"x3'-0"	"	
Courtland st. to almshouse..	355	24"	Clay	1,897.59
	112	18"	"	
	1,547	12"	"	
Stearns avenue, Bridge street, northerly .....	172	12"	"	46,677.85
Stebbins street, Union street, northerly.....	506	12"	Cem.	205.83
Sterns terrace, Central street, northerly .....	393	12"	Clay	467.11
St. James avenue, Bay street to Ripley ave .....	681	12"	Cem.	605.10
Florida st. to Ripley ave...	469	12"	"	521.28
Florida st., northerly.....	417	18"	"	500.89
	300	12"	"	1,073.90
Clarendon st. to Westminster street .....	248	15"	"	404.60
Clarendon st., northerly....	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'-0"x3'-0"	Brick	
Harvard to Princeton st....	528	24"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER	Length in Feet.	Size.	Material.	Cost.
St. James ave., Princeton st., northerly . . . . .	308 249 57	18" 15" 12"	Clay " } "	\$965.55
Stockbridge street, Main street, easterly . . . . .	777	18"	Cem.	\$7,857.01 1,084.57
Sullivan street, Armory street, easterly . . . . .	395	12"	Clay	....
Summer st., Spring to Armory street . . . . .	44 1,344 1,093 750	4'- 3"x6'-0" 4'- 2"x6'-3" 2'-10"x4'-3" 3'- 8"x5'-6"	Brick " } " } "	24,048.88
Sumner ave., Fort Pleasant ave. to Long Hill st. . . . .	448 358	12" 10"	Clay " }	815.24
Fort Pleasant ave. to Ran- dolph st. . . . .	673	2'- 0"x3'-0"	Brick	7,968.46
Randolph st. to Jackson st	360	1'-10"x2'-9"	"	
Jackson st. to Hamilton st..	360	1'- 8"x2'-6"	"	
Hamilton st. to Greenleaf st.	367	1'- 6"x2'-3"	"	
Greenleaf st. to Belmont ave.	355 851 736 272 426	20" 18" 15" 12" 10"	Clay " } " } " }	2,915.88
Belmont ave., easterly . . . .	100	8"	"	37.49
Dickinson st. to White st. . .	2,219	2'-8"x4'-0"	Brick	11,531.37
White st., easterly . . . . .	565	2'-2"x3'-3"	"	2,391.46
Symonds ave., Worthington st. to Bridge st. (includes cost of Bond place). . . . .	300	15"	Cem.	25,659.90 696.89
Talcott ave., Fisk ave. to Plainfield st. . . . .	362 316	15" 12"	Clay " }	549.57
Taylor st., Main to Chestnut st.	650 341 248	15" 12" 12"	Cem. " } Clay	1,347.50 255.73
Temple st., Maple st., easterly. outlet into High school sewer	40 169	15" 15"	" "	34.79 171.71
Tenth street, Garden brook, easterly . . . . .	300 302 421 4	18" 15" 12" 8"	" " } " }	206.50 1,256.39
Terrence st., Union to State st.	374 313 48	12" 10" 10"	" " } Cem.	565.26 34.02
				599.28

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Thomas st., Birnie ave., easterly	451	10"	Clay	\$338.41
Thompson st., Worthington st., southerly.....	603	12"	Cem.	\$638.27
St. James ave. to Bay st....	703	15"	"	749.22
State to Bay st.....	852	12"	"	653.12
Tracy avenue, Franklin street, southerly .....	14	10"	Clay	15.48
	262	10"	"	15.48
Tyler st., Oak to Hancock st..	717	15"	Cem. }	1,165.68
	663	12"	" }	
Hancock to Eastern ave...	601	18"	"	778.27
	795	15"	"	644.31
Eastern ave., easterly.....	251	10"	"	139.49
				2,727.75
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	2,024	3'-4"x 5'-0"	Brick	
	302	2'-6"x 3'-6"	"	
	2,688	2'-0"x 3'-0"	"	27,384.14
	848	1'-8"x 2'-6"	"	
Oak to Orleans st.....	404	15"	Cem.	467.96
Hancock to Stebbins st....	261	2'-0"x 3'-0"	Brick }	2,307.33
	335	1'-10"x 2'-9"	" }	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave....	600	18"	Cem. }	1,413.45
	800	15"	" }	
Eastern ave., easterly.....	248	10"	Clay	152.56
Vassar street, Harvard street, northerly .....	550	12"	Cem.	34,458.84
				89.81
Ventura street, Sumner avenue, northerly .....	351	10"	Clay	289.51
Vernon st., Water st., easterly.	639	15"	Cem.	795.08
Main st., westerly .....	216	12"	"	310.68
				1,105.76
Vine st., Main to Fulton st...	697	12"	"	602.45
Vinton st., Liberty to Franklin st	357	12"	Clay	357.63
	262	10"	"	252.13
				609.76
Walden st., Dickinson street, easterly .....	166	8"	"	94.93
Walnut st., south from State st.	69	1'-6"x 1'-8"	Brick	85.23
north from Charter ave ....	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'-0"x 3'-0"	Brick	4,956.57
Pine to Oak st.....	272	18"	Cem.	410.04
Hancock to Cedar st.....	784	15"	"	
Hancock st., southerly.....	180	12"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut st., north from Man-				
hattan st.....	249	10"	Clay	\$212.35
Florence st., northerly.....	53	8"	Cem.	27.12
Hickory to Florence st.....	1,026	12"	Clay	992.67
				<hr/> \$9,523.30
Walter st., Birnie ave., easterly.	285	12"	Cem.	14.86
Waltham avenue, Wilbraham				
road, southerly.....	546	12"	Clay	598.61
Wareham st., Grand avenue,				
southerly.....	419	10"	"	21.24
Warner place, Fort Pleasant				
ave. to Long Hill st.....	508	12"	"	....
	198	10"	"	
	89	10"	"	
				<hr/> 51.88
				51.88
Warriner ave., Locust street,				
easterly.....	448	12"	"	399.54
Washburn st., Conn. river to				
B. & M. R. R. ....	1,758	7'-0", cir.	Brick	21,678.46
Washington ave. (see Long Hill				
st.).				
Wason ave., Conn. river to				
Plainfield st.....	451	3'-10"x5'-9"	"	16,610.72
Plainfield st. to Fisk ave...	1,051	3'-4"x5'-0"	"	
Fisk ave. to Birnie ave.....	634	3'-2"x4'-9"	"	
Birnie ave. to North Main st.	247	2'-0"x3'-0"	"	
Water st., Gardner to Loring st.	474	1'-10"x2'-9"	"	1,182.58
Loring st., northerly.....	345	12"	Cem.	237.38
Union to Margaret st.....	721	2'-0"x3'-0"	Brick	2,284.34
Union st., northerly.....	868	18"	Cem.	
Elm to State st.....	275	18"	"	508.75
Elm to Pynchon st.....	43	2'-0"x3'-0"	Brick	198.00
	498	2'-6"x3'-6"	"	2,949.29
Pynchon st., northerly..	257	18"	Cem.	404.44
	329	15"	"	460.60
	61	12"	"	85.40
Worthington st., southerly..	209	10"	Clay	333.54
Worthington to Hampden st.	327	15"	Cem.	457.80
Hampden to Railroad street	321	12"	Clay	638.58
Waverly street, North Main to				<hr/> 9,740.70
Chestnut st.....	473	20"	"	1,197.09
	487	10"	"	
Weaver Ramble, Rimmon				
ave., westerly and northerly	480	12"	"	....
Webster st., Liberty to Frank-				
lin st.....	601	12"	"	395.54
Welcome place, Bay street,				
northerly.....	238	8"	"	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellesley st., Cornell street, easterly .....	373	12"	Cem.	\$64.68
Wellington avenue, Wilbraham road, southerly .....	287	15"	Clay	23.53
	244	12"	"	
	291	10"	"	
Wendell ave., Main st., easterly.	458	15"	"	....
Westernview st., Forest Park ave., easterly .....	468	12"	"	511.16
	138	10"	"	
Westford avenue, Wilbraham road, southerly .....	300	15"	"	676.23
	300	12"	"	
	350	10"	"	
Westminster st., Bay to State st.	300	15"	"	\$705.11
	300	12"	"	
	201	10"	"	
St. James ave., southerly ...	773	12"	Cem.	700.02
				1,405.13
White st., Allen to Orange st..	747	24"	Clay	1,717.86
	674	20"	"	1,490.97
	274	18"	"	
Orange st. to Dawson ave..	388	15"	"	389.27
	292	15"	"	275.73
Gordon st. to south line of school lot. ....	690	12"	"	649.43
				4,523.26
Whitney avenue, Water street, westerly .....	450	12"	Cem.	257.32
Wilbraham avenue, Wilbraham road, southerly .....	1,125	12"	Clay	1,020.78
Alden st. to Beverly st. ....	999	10"	"	1,121.36
	1,180	8"	"	
Wilbraham road, State street, easterly .....	248	12"	Cem.	157.79
State st. to Northampton ave.	1,451	2'-0"x3'-0"	Brick	6,198.76
Northampton ave. to Bristol street .....	472	2'-6"x3'-9"	"	8,970.16
	476	2'-4"x3'-6"	"	
	478	2'-2"x3'-3"	"	
	473	2'-0"x3'-0"	"	
	254	1'-10"x2'-9"	"	
	256	1'-8"x2'-6"	"	
Bristol st., easterly .....	263	20"	Clay	859.35
	405	12"	"	
Wilcox st., Water st., easterly.	548	15"	Cem.	891.89
	327	12"	"	
Water st., westerly .....	463	12"	"	205.76

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
avenue, State street, therly.....	282	18"	Clay	\$785.26
	300	15"	"	
	241	12"	"	
uck ave., southerly....	215	8"	"	....
				\$785.26
st., Water to Dale st.	1,576	12"	Cem.	1,489.47
r st., westerly.....	76	15"	"	459.79
	425	12"	"	
st., Cross to State st...	413	12"	Clay	791.42
to Park st.....	265	12"	"	378.17
n to Park st.....	216	18"	Cem.	325.32
n st., southerly.....	220	15"	"	302.23
st., Dickinson st. to vere st.....	349	18"	Clay	1,797.14
	450	15"	"	
	386	12"	"	
ster st.....	424	12"	"	357.96
r st., Knox st., westerly.	80	15"	Cem.	....
	485	10"	"	
op st., Main st., easterly.	52	18"	"	
	141	15"	"	220.81
	520	2'-6"x3'-6"	Stone	....
t street, Armory street, sterly .....	220	10"	Clay	....
de ter., Belmont ave., therly.....	451	10"	"	321.97
ter ave., Plainfield to mie ave.....	1,486	15"	Cem.	53.14
ster st., I. O., Myrtle to estnut st.....	4	24"	Clay	945.80
	290	20"	"	
	382	2'-0"x3'-0"	Brick	
tnut to Holly street...	670	1'-10"x2'-9"	"	2,398.09
st., easterly.....	275	12"	Clay	519.07
	212	10"	"	
	546	20"	"	
st., easterly.....				768.42
ngton st., submerged tlet .....	194	24"	Wood	5,914.38
	22	24"	C. Iron	
river to Main st.....	1,038	5'-7"x7'-0"	Brick	33,410.12
to Dwight st.....	821	5'-4"x7'-0"	"	
ht to Garden brook ..	566	4'-0"x6'-0"	"	

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington st., Garden brook to Spring st.....	738	4'-3"	Brick	\$4,361.35
Spring st., branch north....	35	5'-0"	"	
Spring st., branch south....	47	2'-0" x 3'-0"	"	
Spring street, easterly.....	40	18"	Cem.	
	242	15"	"	614.35
	251	2"	"	
Autumn st., westerly.....	113	2"	"	118.78
near Sacketts ave.....	145	0"	"	111.47
West brook, easterly.....	329	5"	Clay	1,110.54
	217	2"	"	
West brook to Autumn st..	231	5"	"	727.56
Sacketts ave., westerly.....	98	2"	"	207.28
Sacketts ave. to Kibbe ave..	337	2"	Cem.	335.57
Kibbe ave. to Federal st....	794	5"	Clay	826.90
Armory Hill sewer to Mag- azine street.....	167	18"	"	381.28
near Magazine to Bowdoin st.	248	2'-8" x 4'-0"	Brick	20,646.21
	354	2'-1" x 3'-1 1/2"	"	
	359	3'-4" x 7'-2"	"	
Bowdoin st. to St. James ave.	1,307	3'-4" x 6'-9"	"	
				—————\$64 910.50
Yale st., Dartmouth to Prince- ton st.....	350	24"	Clay	1,770.13
	359	18"	"	
	233	15"	"	
Princeton st., northerly....	712	12"	"	452.46
York st.....	1,203	7'-0", cir.	Brick	2,222.59 13,912.27
Total .....	554,323			\$1,327,546.57

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Elliptical shaped.....	1,038	5'- 7"x7'- 0"	Brick and cem. mortar.
" " .....	821	5'- 4"x7'- 0"	" " "
" " .....	1,095	4'-10"x7'- 3"	" " "
" " .....	1,949	4'- 8 'x7'- 0"	" " "
" " .....	1,170	4'- 6"x6'- 9"	" " "
" " .....	1,040	4'- 4"x6'- 6"	" " "
" " .....	2,340	4'- 2"x6'- 3"	" " "
" " .....	1,746	3'- 8"x5'- 6"	" " "
" " .....	830	3'- 4"x5'- 0"	" " "
" " .....	536	3'- 2"x4'- 9"	" " "
" " .....	819	3'- 0"x4'- 6"	" " "
" " .....	1,093	2'-10"x4'- 3"	" " "
" " .....	2,506	2'- 8"x4'- 0"	" " "
" " .....	5,778	2'- 2"x3'- 3"	" " "
" " .....	417	2'- 0"x3'- 0"	" " "
egg shaped.....	566	4'- 0"x6'- 0"	" " "
" " .....	1,131	3'-10"x5'- 9"	" " "
" " .....	1,074	3'- 8"x5'- 6"	" " "
" " .....	3,512	3'- 6"x5'- 3"	" " "
" " .....	359	3'- 4"x7'- 2"	" " "
" " .....	1,307	3'- 4"x6'- 9"	" " "
" " .....	9,586	3'- 4"x5'- 0"	" " "
" " .....	1,056	3'- 2"x4'- 9"	" " "
" " .....	2,877	3'- 0"x4'- 6"	" " "
" " .....	953	2'-10"x4'- 3"	" " "
" " .....	364	2'- 9"x4'- 1 1/2"	" " "
" " .....	2,516	2'- 8"x4'- 0"	" " "
" " .....	4,818	2'- 6"x3'- 9"	" " "
" " .....	800	2'- 6"x3'- 6"	" " "
" " .....	150	2'- 5"x3'- 7 1/2"	" " "
" " .....	8,636	2'- 4"x3'- 6"	" " "
" " .....	8,688	2'- 2"x3'- 3"	" " "
" " .....	603	2'- 1"x3'- 1 1/2"	" " "
" " .....	21,973	2'- 0"x3'- 0"	" " "
" " .....	4,921	1'-10"x2'- 9"	" " "
" " .....	3,980	1'- 8"x2'- 6"	" " "
" " .....	917	1'- 6"x2'- 3"	" " "
" " .....	669	1'- 4"x2'- 0"	" " "
ircular.....	3,017	7'-0"	" " "
" " .....	3,019	6'-6"	" " "
" " .....	1,330	6'-0"	" " "
" " .....	1,743	5'-9"	" " "
" " .....	3,842	5'-6"	" " "
" " .....	949	5'-3"	" " "
" " .....	2,257	5'-0"	" " "
" " .....	3,274	4'-7 1/2"	" " "
" " .....	1,762	4'-6"	" " "
" " .....	3,362	4'-3"	" " "
" " .....	952	4'-1"	" " "

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	2,399	4'-0"	Brick and cem. mortar.
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	3,202	2'-0"	" " "
" .....	23,825	24"	Clay pipe.
" .....	17,489	20"	" "
" .....	28,079	18"	" "
" .....	40,434	15"	" "
" .....	84,717	12"	" "
" .....	63,307	10"	" "
" .....	14,710	8"	" "
" .....	369	6"	" "
" .....	23,972	18"	Cement pipe.
" .....	39,771	15"	" "
" .....	64,445	12"	" "
" .....	4,913	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Segmental .....	93	6'-0"x4'-3"	Brick and cem. mortar.
" .....	60	5'-0"x2'-1"	Concrete.
Miscellaneous shapes .....	2,519		Stone, brick, and mortar.
Total .....	554,323		

Classified as follows:—

	Feet.	Miles.
Brick and cement mortar, . . . . .	143,727	27.22
Miscellaneous materials, . . . . .	3,743	.71
Clay pipe, . . . . .	272,930	51.69
Cement pipe, . . . . .	133,923	25.36
Total, . . . . .	554,323	104.98

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	2,399	4'-0"	Brick and cem. mort
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	3,202	2'-0"	" " "
" .....	23,825	24"	Clay pipe.
" .....	17,489	20"	" "
" .....	28,079	18"	" "
" .....	40,434	15"	" "
" .....	84,717	12"	" "
" .....	63,307	10"	" "
" .....	14,710	8"	" "
" .....	369	6"	" "
" .....	23,972	18"	Cement pipe.
" .....	39,771	15"	" "
" .....	64,445	12"	" "
" .....	4,913	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Segmental .....	93	6'-0"x4'-3"	Brick and cem. mort
" .....	60	5'-0"x2'-1"	Concrete.
Miscellaneous shapes .....	2,519		Stone, brick, and m
Total .....	554,323		

Classified as follows:—

	Feet.	M
Brick and cement mortar, . . . . .	143,727	2
Miscellaneous materials, . . . . .	3,743	
Clay pipe, . . . . .	272,930	5
Cement pipe, . . . . .	133,923	2
Total, . . . . .	554,323	10

**Annual Report**  
**Superintendent of**  
**Streets and Sewers**

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**Springfield, Massachusetts**

**COMPLIMENTS OF**

**ARTHUR A. ADAMS,**

**Superintendent of Streets and Sewers.**

**For the Year 1906**





**Annual Report**  
**Superintendent of**  
**Streets and Sewers**

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**Springfield, Massachusetts**



**For the Year 1906**

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# THIRTY-EIGHTH ANNUAL REPORT

## OF THE

# STREET DEPARTMENT.

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SPRINGFIELD, MASS., December 28, 1906.

*to the City Council:—*

In accordance with the requirements of Chapter 19, Section 1 of the Revised Ordinances, I have the honor of presenting herewith the statements of receipts and expenditures of the Street Department, and descriptions of work done during the fiscal year ending December 10, 1906.

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## FINANCES IN GENERAL.

### REGULAR ACCOUNTS.

#### RECEIPTS.

Repairs on Ways and Bridges,	\$207,204 46
Repairs on Sidewalks and Curbing,	25,725 55
Repairs on Grading Streets,	36,051 30
	\$268,981 31

#### EXPENDITURES.

Repairs on Ways and Bridges,	\$204,238 84
Repairs on Sidewalks and Curbing,	25,094 20
Repairs on Grading Streets,	33,036 29
	\$262,369 33

#### UNEXPENDED BALANCES.

Repairs on Ways and Bridges,	\$2,965 62
Repairs on Sidewalks and Curbing,	631 35
Repairs on Grading Streets,	3,015 01
	\$6,611 98

*Report on Streets.***SPECIAL ACCOUNT.****CITY YARD, SUMMER STREET.**

Receipts, . . . . .	\$41,500 00
Expenditures, . . . . .	26,917 03
	<hr/>
Unexpended balance, . . . . .	\$14,582 97

**WORK IN GENERAL**

Streets, . . . . .	{	Graveling, . . . . .	6,290 feet
		Macadamizing, . . . . .	21,054 feet
		Macadam resurfacing, . . . . .	7,526 feet
		Bitulithic paving, . . . . .	3,351 feet
		Granite block paving and repaving, . . . . .	1,641 feet
		Vitrified block paving, . . . . .	145 feet
		Wood block paving, . . . . .	1,150 feet
Street cleaning, . . . . .	{	Gravel, . . . . .	46.11 miles
		Macadam, . . . . .	55.87 miles
		Paving, . . . . .	8.9 miles
Sidewalks, . . . . .	{	Brick (new), . . . . .	771 feet
		Brick (relaid), . . . . .	2,907 feet
		Tar concrete (new), . . . . .	7,694 feet
		Tar concrete (resurfaced), . . . . .	4,073 feet
		Cinder, . . . . .	550 feet
Curbing, . . . . .	{	Set, . . . . .	10,567 feet
		Reset, . . . . .	7,015 feet
Crosswalks—new, . . . . .			41
Streets watered, . . . . .			83.68 miles

# FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

### RECEIPTS.

Regular appropriation, . . . . .	\$160,000 00	
Springfield Street Railway Company,		
Corporation tax, . . . . .	21,145 88	
Excise tax, . . . . .	12,132 26	
Departments and private parties, bills rendered, . . . . .	13,926 32	
		<hr/> \$207,204 46

### EXPENDITURES.

Mobile, repairs and supplies, . . . . .	\$863 14	
Tires, repairs and care, . . . . .	1,833 82	
Garage yard, Logan street, . . . . .	37 81	
Garage yard, Lyman street, . . . . .	2,792 76	
Garage yard, Summer street, . . . . .	1,133 66	
Engineering, . . . . .	515 12	
Material and material charged to departments, . . . . .	4,845 06	
Material and material charged to private parties, . . . . .	9,001 52	
Damages, account street relocations, . . . . .	602 00	
General and general expenses, . . . . .	2,967 27	
Men's winter and holiday pay, . . . . .	875 00	
Materials on hand, . . . . .	655 52	
Salary of superintendent, . . . . .	2,300 00	
Salary of second assistant superintendent, part, . . . . .	821 70	
Garage roller house repairs and roller equipment, . . . . .	964 62	
Construction, {	Grading and graveling, . . . . .	5,280 81
	Macadamizing, . . . . .	36,663 10
	Paving, . . . . .	51,455 03
	Cleaning, . . . . .	30,878 83
	Cleaning equipment, . . . . .	1,215 20
Maintenance, {	General repairs, . . . . .	20,109 60
	Macadam resurfacing, . . . . .	9,249 81
	Winter expenses, . . . . .	17,328 09
and supplies, . . . . .	2,188 64	
		<hr/> \$204,578 10
by City teams, . . . . .	339 26	
		<hr/> \$204,238 84
Unended balance, . . . . .	2,965 62	
		<hr/> \$207,204 46

## BILLS RECEIVABLE.

Bills unpaid December 10, 1905, . . . .	\$17,613 27	
Bills committed, fiscal year 1906, . . . .	13,440 76	
	<hr/>	\$31,054 03
Bills paid, fiscal year 1906, . . . . .	\$13,913 19	
Abatements, . . . . .	16,001 65	
	<hr/>	29,914 84
		<hr/>
Bills receivable December 10, 1906, . . . .		\$1,139 19

## WALKS AND CURBING.

## RECEIPTS.

By regular appropriation, . . . . .	\$10,700 00	
From abutters for work done previous to 1906, . . . .	6,211 08	
From abutters for work done during 1906, . . . .	4,814 47	
Transferred from Watering Streets, . . . .	4,000 00	
	<hr/>	\$25,725 55

## EXPENDITURES.

Office and general expenses, . . . . .	\$654 37	
Salary of second assistant superintendent, part, . . . .	429 34	
Engineering, . . . . .	471 09	
Setting and resetting curbing, . . . . .	4,145 92	
Sidewalk repairs not chargeable, . . . . .	581 06	
Work and material not chargeable, . . . . .	839 12	
Crosswalks, new and relaid, . . . . .	3,782 52	
Tools, . . . . .	35 98	
Work and material charged to abutters, . . . . .	10,238 52	
Work and material charged to departments, . . . . .	1,069 83	
Material, . . . . .	2,849 76	
	<hr/>	\$25,097 51
Credit by City teams, . . . . .	3 31	
	<hr/>	\$25,094 20
Unexpended balance, . . . . .	631 35	
	<hr/>	\$25,725 55

# Report on Streets.

7

## BILLS RECEIVABLE.

unpaid December 10, 1905, . . .	\$5,633 59	
committed, fiscal year 1906, . . .	12,002 64	
	<hr/>	\$17,636 23
paid, fiscal year 1906, . . .	\$11,025 55	
ements, . . . . .	507 27	
	<hr/>	11,532 82
		<hr/>
receivable December 10, 1906, . . .		\$6,103 41

## WATERING STREETS.

### RECEIPTS.

ppropriation, . . . . .	\$9,500 00	
watering streets assessments, . . . .	24,305 70	
1 Springfield Street Railway Company,		
by agreement, . . . . .	2,173 60	
bills rendered, . . . . .	72 00	
	<hr/>	\$36,051 30

### EXPENDITURES.

pment—one new cart, . . . . .	\$323 40	
ral expenses, . . . . .	385 40	
dpipes and car hydrants, construction,		
maintenance, opening and closing, . .	1,555 05	
dpipe bases, construction and maintenance,	283 42	
ring carts, repairs and storage, . . .	802 05	
use of teams as per pay rolls, . . .	1,815 25	
use of teams as per contracts, . . .	13,112 90	
rican Car Sprinkler Company, as per		
contracts, . . . . .	9,641 94	
ector, . . . . .	929 76	
ector's horse and carriage, . . . .	187 12	
	<hr/>	\$29,036 29
sferred to Walks and Curbing, . . .	4,000 00	
	<hr/>	\$33,036 29
pendent balance, . . . . .	3,015 01	
	<hr/>	\$36,051 30



*Report on Streets.***CITY YARD, SUMMER STREET.**

## RECEIPTS.

By sale of Lyman street yard, . . .	\$27,250 00	
By special appropriation, . . .	14,250 00	
		<hr/>
		\$41,500 00

## EXPENDITURES.

Land on Summer street, . . .	\$23,000 00	
Auctioneer, fee, . . .	280 90	
Plans and specifications for building, . .	330 00	
Barn and wagon house (partial payment) as per contract, . . .	3,200 00	
Miscellaneous, . . .	106 13	
		<hr/>
	\$26,917 03	
Unexpended balance, . . .	14,582 97	
		<hr/>
		\$41,500 00

## WORK ITEMIZED.

## BRIDGES.

## REPAIRS AND CARE.

	Description of work.	Cost.
ry street, over N. Y., N.	Floor repairs,	\$130 65
I. & H. Railroad,		
ry street, over Boston &	Floor repairs,	29 41
Albany Railroad,		
hire street, Red House	Replanking floor,	100 19
Crossing,	Painting and sidewalk re-	
low, I. O.,	pairs,	486 69
	Replanking floor,	181 70
street, I. O.,	Floor and sidewalk repairs	
end,	and care,	79 70
	Repairs to truss, floor and	
oll,	roof, and care,	532 41
	Replanking floor,	63 21
street, I. O.,	Replanking floor,	112 66
field street,		
mes avenue, over N. Y.,	Floor repairs,	30 83
I. H. & H. Railroad,	Floor repairs and care,	85 37
end,	Miscellaneous repairs,	1 00
y bridges,		
		\$1,833 82

udes \$474.47, balance of the cost of painting done in 1905.

## STREET CONSTRUCTION.

Fiscal year 1906.

## GRADING AND GRAVELING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Total cost.
Alderman street,	Sorrento avenue to Scott street,	310	1,205	**\$658 15
*Hampton street, I. O.,	Chestnut street, 357 feet easterly,	357	1,428	268 01
*Horace street,	Dickinson to Orange street,	709	2,563	94 88
*Massasoit street,	Prospect street, 266 feet northerly,	266	887	116 81
*Melrose street,	Eastern avenue, 580 feet westerly,	580	1,482	108 84
Parker street, I. O.,	Station 875 to Station 2600,	1,725	4,917	1,928 81
Plumtree road,		1,400	2,800	560 96
Pomona street,	Scott street to Old Wilbraham road (incomplete),	151	503	**\$11 20
Scott street,	White to Alderman street,	642	2,140	**1,934 41
*Wilmont street,		90	400	16 74
		6,290	17,625	\$5,280 81

\* A part of the gravel which was used was obtained from other streets.

\*\* Includes cost of curbing set in accordance with order of City Council.

MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Andrew street, Armory street, Bliss street, *Forest street, Forest Park avenue, Forest Park avenue gutters, Homer street, *James street, Lexington avenue, **Leyfred terrace, Lillian street, Maplewood terrace, *Mountainview street Oakland street, **Plainfield street, *Prospect street,	Burr to Dawes street, Liberty to Cleveland street, Water street to N. Y., N. H. & H. R. R., Fort Pleasant avenue to Forest street, 22½ feet in width, South side Fort Pleasant avenue to Forest Park avenue, Allen to Orange street, Demond avenue to Rowland avenue, Massasoit to Carew street (incomplete),	815 1,119 271 784 1,760 582 928 622 625 387 1,801 682 1,605 1,137 817	1,015 3,698 903 2,502 4,475 1,940 2,356 1,659 2,102 989 3,075 2,330 5,350 3,160 2,996	\$0.61 .55 .64 .50 .53 .53 .37 .79 .82 .54 .54 .50 .61 .89	\$622 60 2,018 98 576 12 1,254 31 2,392 13 368 89 1,026 18 878 01 1,305 21 1,717 10 536 98 1,655 79 1,157 61 3,270 78 2,827 40 1,012 06

## STREET CONSTRUCTION.

## MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Quincy street,	Hancock to Eastern avenue,	1,345	3,902	\$0.46	\$1,807 87
Sumner avenue,	Lenox street to east line Dickinson street,	484	4,264	.69	2,945 48
Union street,	Easterly of Oak, widening,		869	.43	157 74
Waltham avenue,		985	2,628	.47	1,245 78
Warwick street,	Haywood street easterly,	811	2,708	.60	1,619 49
Woodside terrace,	Gutters,				201 88
Worcester street, I.O.,	Oak street to Fiberloid Company's drive- way, 18 feet in width,	4,494	8,988	.67	6,041 31
		21,054	61,894		\$36,689 10

\* A part of the trap rock which was used was obtained from other streets. Cost of this rock is not included.  
 \*\* Includes the cost of cinder foundation.

**Note.** Areas and costs of gutter paving in connection with macadam are included in the above table.

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Birle avenue,	Northerly of Hooker street,	Johnsonburg vitrified blocks,	145	488	\$1.89	\$918.49
*Fulton street,	Cypress to Vine street,	Granite blocks,	1,125	3,006	.91	2,725.78
Hillman street,	Main to Dwight street,	Bitulithic,	648	2,025	2.11	4,281.01
Main street,	Bliss to William street,	Creo-resinate wood blocks,	1,150	6,460	3.37	21,796.45
Market street,	State to Harrison avenue,	Bitulithic,	968	1,887	2.80	4,387.70
North Main street,	Plainfield to Morgan street,	Bitulithic,	730	4,485	2.08	9,388.61
*Railroad street,	Water street easterly,	Granite blocks,	187	415	.80	330.85
Railroad street,	Main street westerly, relaying,	Granite blocks,	379	1,124	.52	582.16
Walnut street,	Lebanon to Hancock street,	Bitulithic,	1,005	3,334	2.06	6,852.87
			6,287	28,219		\$51,168.42
Chestnut and Ferry streets, in anticipa- tion of future paving,						296.61
						\$51,455.03

Note. The Johnsonburg vitrified clay blocks and the creo-resinate gum wood blocks are laid on a 5" Portland cement concrete foundation and  $\frac{1}{4}$ " cement mortar bed. The joints are filled with Portland cement grout. The Bitulithic paving consists of bitulithic mixture rolled to a depth of two inches, upon a foundation of trap rock, which is rolled to a depth of five inches. Paving blocks are laid on a cement concrete foundation alongside the rails of the car tracks.

\* Old granite blocks laid on sand foundation. The cost of blocks is not included.

## STREET MAINTENANCE.

Fiscal year 1906.

## MACADAM RESURFACING.

Streets.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
Mill street,	Main to Locust street, Pecousic avenue to brick paving, State to Lyman street, Railroad to State street,	527	2,492	\$0.19	\$465.95
Main street,		2,066	8,088	.39	3,132.90
Spring street,		2,378	7,741	.32	2,514.81
Water street,		2,560	8,744	.36	3,186.15
		7,526	27,066		\$9,949.81

**STREET MAINTENANCE.**  
**GENERAL REPAIRS.**

street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
ave.,			\$131 78		\$131 78
net ave.,		\$14 14	7 61		21 75
street,		39 60	22		39 82
street,	\$379 68	21 42		\$64 04	965 14
y street,	114 58		4 20	11 07	129 85
ft street,		6 79	14 32	81	21 92
reet,	6 87	81 93	32 92		121 72
ad,	12 53			38 41	50 94
wood ave.	50 54				50 54
nt ave.,	74 56	145 93	4 00	38 22	262 71
1 street,	40 96				40 96
irestreet,					
l.,	417 20			154 70	571 90
street,		10 09	16 48		26 57
1 road,	433 47	105 25	7 35	57 73	608 80
oin street,	3 05	12 33	13 25		28 63
s street,	24 13				24 13
street,		139 96		17 17	157 13
street,			30 05		30 05
nghamst.,	43 86		9 60		53 46
street,	29 86	41 84			71 70
treet,		66 93		81	67 74
l street,		308 36	10 52	8 83	327 71
n street,	20 53		5 72		26 25
ave.,	22 96				22 96
y street,	21 60				21 60
ut street,		38 76	5 23	7 14	51 13
ut street,					
l.	87 93			5 32	93 25
h street,		9 51	23 12		32 63
don st.,	22 42	1 68			24 10
n st.,		22 05	6 60		28 65
ess st.,		27 55			27 55
ason st.,	138 99		6 29		145 28
it street,			15 81	80 88	96 69
ourt st.,		21 66			21 66



**STREET MAINTENANCE.****GENERAL REPAIRS.—CONTINUED.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Eastern ave.,		\$52 29			\$52 29
Elliott street,		25 32	\$13 79		39 11
Elm street,		1 12	12 68	\$13 25	27 05
Ferry street,		37 72			37 72
Fiberloid street, I. O.,				21 37	21 37
Firglade ave.,	\$49 70				49 70
Florentine Gardens,	22 51				22 51
Forest Park ave.,	85 20	1 68	41 73		128 61
Fort Pleasant avenue,	246 05	304 39	37 54		587 98
Fremont street,		1 68	29 05		30 73
Fulton street,		20 12	14 63		34 75
Girard ave.,	37 42				37 42
Green street,	31 89		3 87		35 76
Hampden st., I. O.,	146 36			15 80	162 16
Hancock street,	96 60	69 63	12 00		178 23
Harrison ave.,		20 43			20 43
Hickory street,	16 17	9 19		74 75	100 11
High street,		14 11	58 75		72 86
Howard street,		5 61	21 06		26 67
Jackson street,	63 14				63 14
James street,	14 40		8 79		23 19
King street,		71 79			71 79
Liberty street,	270 21	82 21		19 86	372 28
Locust street,		140 22	19 50		159 72
Lyman street,		15 37	11 52	11 78	38 67
Main street,		35 31	47 05	383 87	466 23
Main st., I. O.,	121 45	228 77	95	49 09	400 26
Manhattan st.,	28 84				28 84
Maple street,		105 92	10 18		116 10
Maplewood ter.,	50 59			10 43	61 02
Margaret street,		1 68	23 99		25 67
Marion street,	23 30				23 30

STREET MAINTENANCE.

GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Market street,		\$101 64	\$16 48	\$69 28	\$187 40
Massasoit st.,	\$17 59		6 38		23 97
Mattoon street,		23 72			23 72
Mill street,		124 49	8 72	66	133 87
Monroe street,	21 18				21 18
Morgan street,		10 98	22 62		33 60
Mulberry street,	10 71	15 12	4 61		30 44
Myrtle st., I. O.,	26 57			85 92	62 49
North Main st.,		254 94		6 13	261 07
Oak street,		26 66	44 11	56	71 33
Oak st., I. O.,	453 84	153 27		13 78	620 89
Oakland street,		11 52		52 01	63 53
Orange street,	27 84				27 34
Palmer ave.,		5 86		14 35	20 21
Park street,		23 78	33 01		56 79
Parker st., I. O.,	1,150 81			149 90	1,300 71
Pasco st., I. O.,	21 03			53 66	74 69
Pearl street,		29 34	35 13		64 47
Pine street,		21 97			21 97
Plainfield st.,		111 40	2 06	1 81	115 27
Plumtree road,	25 03			28 48	53 51
Prospect street,	68 41				68 41
Pyncheon street,		6 34	10 74	11 12	28 20
Queen street,	27 76				27 76
Quincy street,	24 87	4 48			29 35
Revere street,	49 34				49 34
Ridgewood pl.,			37 77		37 77
Riverview ter.,	41 97				41 97
St. James ave.,	60 18	32 84		5 93	98 95
Salem street,		15 77	11 18		26 95
School street,		12 29	14 98		27 27
Seventh street,		2 17	22 57		24 74
Sharon street,		20 41		1 37	21 78
Sixteen Acre road,	187 88			18 67	206 05
South street,	86 77	9 97	4 25		100 99

## STREET MAINTENANCE.

## GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Spring street,		\$26 93		\$42 24	\$69 17
Springfield st.,	\$209 52				209 52
State street,		433 81	\$38 73	232 17	704 71
Stebbins street,	22 80				22 80
Stockbridge st.,		20 42			20 42
Stony Hill road,	20 59			10 97	31 56
Summer street,		32 55	5 38	163 31	201 24
Sumner ave.,	243 54	65 84	7 14	12 49	329 01
*Sundry streets,	497 50	705 72	538 37	212 25	1,953 84
Taylor street,	24 88				24 88
Temple street,		5 95	11 65	152 00	169 60
Tinkham road,	49 39			14 13	63 52
Tyler street,	18 34	4 48			22 82
Union street,		75 79	57 00	10 05	142 84
Vernon street,		9 82		22 13	31 95
Walnut street,		140 34	5 15	1 90	147 39
Warwick ave.,	27 02				27 02
Water street,		269 72	129 07	77 13	475 92
Webster street,		67 30			67 30
Westford ave.,	21 51				21 51
White street,	155 27	10 03	141 47		306 77
Wilbraham avenue,	25 59				25 59
Wilbraham rd.,	934 98	71 15	49 14	1,178 54	2,233 81
Wilcox street,		5 95	26 56		32 51
William street,	19 18		19 84		39 02
Willow street,		105 52	43 92		149 44
Woodside ter.,	6 70		24 01		30 71
Worcester st.,					
I. O.,	195 24	7 62		43 04	245 90
Worthington st.		222 25	9 40	111 88	343 53
	\$8,522.33	\$5,660.49	\$2,093.59	\$3,833.19	\$20,109 60

\* Individual street repairs costing less than \$20.00.

## SIDEWALKS AND CURBING.

Fiscal year 1906.

## CONSTRUCTION AND RECONSTRUCTION.

By orders of the City Council.

Street.	SIDEWALKS.			CURBING.		Order approved.
	Length in feet.	Material.	Description.	Length in feet. 4'	Length in feet. 6"	
Avon place, southerly,	100	Brick,	Relaid,			June 6, 1906.
Calhoun street,	310	Brick,	Relaid,			May 8, 1906.
Calhoun street,	345	Tar concrete,	New,			May 8, 1906.
Cambridge street,	208	Tar concrete,	New,			June 6, 1906.
Cambridge street,	1,468	Tar concrete,	Skim coated,			June 6, 1906.
Chestnut street, easterly side,				331		June 26, 1906.
Chestnut street, westerly side,	278	Brick,	New,			Aug. 8, 1898.
Franklin street, northerly side,					49	Nov. 2, 1904.
Frost street,				27		May 17, 1898.
Hickory street, southerly side,	431	Tar concrete,	New,			May 14, 1906.
Knox street,	100	Brick,	Relaid,	411		May 14, 1906.
Knox street,	150	Tar concrete,	New,			May 14, 1906.
Lenox street,				456		May 16, 1906.
Main street, I. O.,	207	Tar concrete,	Skim coated,			Sept. 12, 1905.
Main street, I. O.,	2,132	Tar concrete,	New,			Sept. 12, 1905.
Melrose street,	338	Tar concrete,	Skim coated,			June 6, 1906.
Melrose street,	1,465	Tar concrete,	New,	1,163		June 6, 1906.

## SIDEWALKS AND CURBING—CONTINUED.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet.	Order approved.
		Material.	Description.	4"	6"
Mulberry street,	1,026	Brick,	Relaid,		Oct. 24, 1905.
North street, easterly side,	283	Brick,	New,		Aug. 8, 1898.
Oak street,	1,371	Brick,	Relaid,		Sept. 27, 1904.
Orange street,	2,021	Tar concrete,	New,	1,289	Nov. 15, 1904.
Parkwood street,	55	Tar concrete,	Skim coated,		June 1, 1904.
Revere street,	217	Tar concrete,	New,		Nov. 15, 1904.
Ridgewood place,				1,148	Sept. 10, 1906.
State street, southerly side,	550	Cinder,	New,		Dec. 16, 1902.
Thomas street,	100	Brick,	New,	748	June 12, 1906.
White street, easterly side,				573	Mar. 30, 1903.
Orange street to Dawson ave.,					
White street, westerly side,					
Orange street to schoolhouse,	725	Tar concrete,	New,	972	May 14, 1906.
Wilbraham avenue,	1,424	Tar concrete,	Skim coated,		Nov. 28, 1905.
Wilbraham road, southerly side,	581	Tar concrete,	Skim coated,		June 9, 1906.
Woodside terrace,				471	Sept. 11, 1905.
				7,564	
					49

# SIDEWALKS AND CURBING.

## CONSTRUCTION BY ORDERS OF ABUTTERS.

Street.	Length in feet	SIDEWALKS.		CURBING.	
		Material.	Descrip- tion.	Length in feet. 4'	6'
as place,				75	
on street,				87	
inson street,				50	
klin street,	110	Brick,	New,		
pshire street, I. O.,				135	
npden street, I. O.,				277	
ly street, I. O.,				612	
ce street,				325	
street,					152
ellaneous streets,				222	16
er avenue,					51
xect street,				470	133
apson street,					45
raham road,				79	
rester street, I. O.,				225	
				2,557	397

ing furnished by owner of abutting property.

**STREETS MADE PUBLIC.**

Name	Limits.	Length in feet.
Abbe avenue,	Plainfield street westerly.	925
Alderman street,	Dickinson to Pomona street,	1,330
Berkshire street, I. O.,	Oak street easterly.	325
Birnie avenue.	Arch to Thomas street.	1,945
Courtland street.	State street northerly.	650
Dukes street, I. O.,	Berkshire to Holly street.	400
Fiberloid street, I. O.,	Berkshire to Worcester street,	2,300
Grenada terrace.	Dickinson to Pomona street.	1,087
Hampden street, I. O.,	Chestnut to Holly street.	600
Holly street, I. O.,	Berkshire to Worcester street,	1,045
Marion street.	Bowles to McKnight street,	520
Medford street,	North Main street to Birnie avenue,	624
Melrose street,	Eastern avenue westerly,	580
Ormond street,	Sumner to Belmont avenue,	360
Pease street,	Bowles to Marion street,	148
Pomona street,	Sumner avenue to Alderman street,	900
Scott street,	Pomona to White street.	640
		14,409

**STREETS RELOCATED.**

Name.	Limits.	Length in feet.
Boston road,	Near Old Bay road,	1,062
Bridge street,	Main to Chestnut street,	1,065
Main street,	Mill street northerly,	200
Mill street,	Main street easterly,	245
Oak street,	State to Walnut street,	1,350
Old Wilbraham road,	Pomona to White street,	1,230
Union street,	Widening, Union street easterly,	163
Wilbraham road,	At Sixteen-Acre mill pond,	200
		6,415

## INVENTORY.

### STREET AND SEWER DEPARTMENTS.

le, . . . . .	\$500 00
Summer street, . . . . .	23,600 00
Summer street,—buildings, . . . . .	3,500 00
Logan street, . . . . .	7,000 00
quarry, Westfield, . . . . .	225 00
ngine house, trap rock crusher and tools, . . . . .	1,500 00
nk, Five Mile pond, . . . . .	100 00
nk, Island pond, . . . . .	380 00
nk, Boston road, . . . . .	80 00
rollers, . . . . .	10,400 00
ler house, . . . . .	1,200 00
horses, wagons, sleighs, harness, etc., . . . . .	4,448 75
ur street watering carts, . . . . .	4,815 00
niture, . . . . .	317 00
road materials, . . . . .	16,344 11
	<hr/>
	\$73,809 86

## GENERAL DESCRIPTIONS.

### PAVING.

street work of the most importance would properly the wood block paving, which was laid in Main street of the granite paving between Bliss and William streets, bitulithic paving in Hillman, Market, North Main, and streets.

wood blocks were purchased from the United States Reserving Company of New York, and were made from um wood treated by the creo-resinate process. The advance in price for hard pine, from which the blocks re used in this city have been made, demanded the use xpensive wood, and it is expected that black gum wood ve satisfactory for paving purposes.



This wood is guaranteed against decay and other defects, which would render it unsuitable for the purpose intended, for a period of ten years. The blocks have been laid on a concrete foundation and mortar bed, by departmental labor, to insure proper quality of workmanship and materials.

The Portland cement concrete foundation,  $4\frac{1}{2}$ " to 5" in depth, is laid in accordance with methods patented by the *Hassam Paving Company* of Worcester, Mass., arrangements therefor having been made with that company. Briefly described, the method provides for spreading coarse trap rock upon the prepared subgrade, after which it is rolled with a steam roller until the stone has been thoroughly compacted.

Portland cement grout, mixed in the proportion of one part of cement to three parts of fine sand, is then poured upon the stone until all interstices are filled. The surface is then rolled, and where necessary additional grout is added.

Upon the concrete surface thus prepared is spread Portland cement mortar, mixed in the proportion of one part of cement to four parts of sand, on which mortar the blocks are laid.

The blocks are grouted with Portland cement, mixed in the proportion of one part of cement to two parts of sand.

The bitulithic paving, aggregating a total of 11,731 square yards, was also laid by departmental labor under arrangements with *Warren Brothers Company* of Boston similar to those made last year, by which the mixing plant, bituminous materials, skilled men, etc., were furnished to the city.

### MACADAMIZING.

The length of streets macadamized during the year amounts to 21,054 feet, which has been distributed over twenty streets. In accordance with the custom prevailing for a number of years, all but two streets have been macadamized to their full widths. Worcester street, Indian Orchard, and Forest Park avenue were



BITULITHIC PAVEMENT IN MARKET STREET.

LAI D IN 1906.

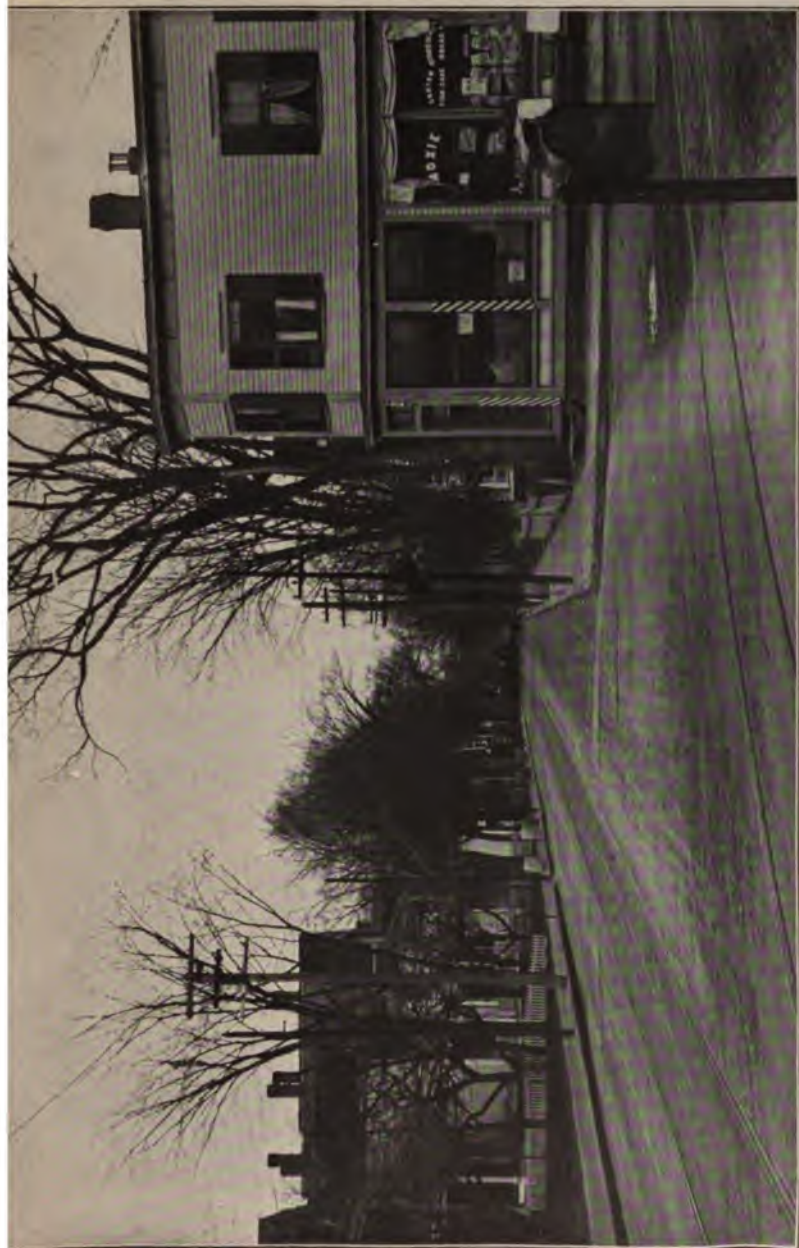
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ASTOR, LENOX AND  
TILDEN FOUNDATIONS



BITULITHIC PAVEMENT IN HILLMAN STREET.  
LAID IN 1906.

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BITULITHIC PAVEMENT IN WALNUT STREET.  
LAID IN 1906.

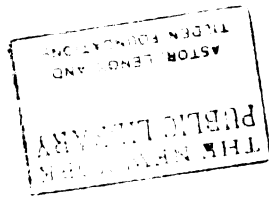
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TILDEN FOUNDATIONS





BITULITHIC PAVEMENT IN NORTH MAIN STREET.  
LAID IN 1906.







CREO-RESINATE WOOD PAVEMENT IN MAIN STREET.  
LAID IN 1906.

2

macadamized to widths of eighteen and twenty-two and one-half feet respectively, as it was decided that the present requirements did not warrant doing the work to the full widths between the curbs.

### SPRINGFIELD STREET RAILWAY COMPANY.

By order of the City Council, approved June 12, 1906, bills amounting to \$15,860.23, rendered against the Springfield Street Railway Company during the years 1898-1902 inclusive, on account of the removal of snow from streets containing car tracks, were abated. The City Solicitor advised that these claims were rendered invalid by Chapter 14, Section 44, of the Revised Laws, which imposes an excise tax upon the railway company payable to the city, and which is designed to reimburse the city for such expenses.

An agreement between the city and the Springfield Street Railway Company, dated November 17, 1906, has been renewed for the coming winter, by which the railway company is to remove from certain streets the equivalent of the amount of snow plowed from its tracks within the limits of the city.

The Springfield Street Railway Company has substituted Trilby section full grooved rails for the T rails in Walnut street between Cedar and Hancock streets, and in North Main street as far north as Morgan street, where bitulithic paving has been laid.

The laying of the Burcham Bend track, commenced in 1905, has been finished, and in connection therewith the bank of the Chicopee river at the bend has been riprapped.

Large areas of wood pavement in Main street, between State and Sharon streets, have been taken up and relaid during the summer and fall by and at the expense of the Springfield Street Railway Company, on account of worn and defective rails. These rails, of Trilby section, were laid in 1901, and it is a

matter of regret as well as surprise that they should prove of such short life. It is certain that the pavement suffers considerably on this account, although pavements so constructed can be repaired more satisfactorily than can many other varieties.

### PLAINFIELD STREET BRIDGE.

The Plainfield street bridge over the Boston and Maine railroad, erected in 1890, was found upon examination by Mace Moulton, Consulting Engineer, of New York, to need strengthening. A report embodying his suggestions was submitted to the Supervisors of Highways and Bridges on April 28, 1905.

Inasmuch as the bridge requires strengthening in order to accommodate the heavy cars of the Springfield Street Railway Company, arrangements have been made whereby that company is to do the work and pay all the necessary costs. It is expected that the work will be started in the coming spring.

### CITY YARDS.

The Lyman street yard, purchased about fifty years ago, was sold at auction on June 9, 1906, to C. E. Brown & Company of this city for \$27,250, it having been apparent for some time that larger quarters were necessary to properly supply the needs of the Street and Sewer Departments. This sum, together with \$14,250 appropriated by special order of the City Council, October 2, 1906, provided for the purchase of land for a new city yard and also for the building of a barn and wagon house.

The lot lying between land of the Boston and Albany Railroad Company and Summer street was purchased for yard purposes from the heirs of A. S. Dwelly for \$23,000. This lot, which has a frontage of 353 feet, an average depth of 225 feet, and containing about 82,250 square feet, is expected to prove adequate for a number of years.

Kirkham & Parlett, architects, of this city, have prepared plans for the barn and wagon house, and the general contract for their construction has been awarded to W. H. Falvey & Son of this city for \$16,500.

The barn will provide for twenty horses and the wagon house will contain office, tool rooms, etc.

### CARLISLE BROOK CULVERT.

The brownstone box culvert at Carlisle brook, under the Wilbraham road, was found to be defective, and has been replaced by a cement concrete culvert four feet and three inches in diameter at a cost of \$1,034.74. This has been so designed and placed that it may become a part of the future storm water system in that vicinity, draining into the Watershops pond.

### CHANGES IN STREET NAMES.

The names of the streets lying on the easterly and westerly sides of Stearns Park have been changed from Stearns Park streets to Stearns Square.

South street, between Mill river and Pecousic avenue, has been renamed Main street, it being the southerly continuation of that thoroughfare.

### CONSTRUCTION OF NEW STREETS.

Birnie avenue has been laid out and established as a public way between Arch and Thomas streets, by order of the City Council, approved May 14, 1906, making this thoroughfare continuous between Arch street and Wason avenue. In connection therewith the Springfield Street Railway Company was paid \$3,097.50 for land damages and the removal of a part of its car house. Brick paving has been laid northerly of Hooker street where the railway tracks cross Birnie avenue, as described elsewhere in this report.

By order of the City Council, approved November 1, 1906, Scott street has been laid out and established as a public way from White street to the junction of Alderman and Pomona streets, which were made public by orders of the City Council, dated November 1 and November 27, 1906, respectively.

One of the principal reasons for opening these streets was to furnish convenient access to the new White Street School for the children of the neighborhood.

The grading and graveling of Scott and Pomona streets and a part of Alderman street has been finished and tar walks have been built on the southerly side of Scott street and on the easterly side of Pomona street. Temporary board walks have been built in Alderman street.

Union street easterly of Oak street has been widened sixteen and one half feet on the northerly side, making a total width of forty-nine and one half feet, in accordance with an order of the City Council approved July 2, 1906. This section of the roadway has been macadamized.

### BUILDING LINES.

The recent agitation for the establishment of building lines on various streets, the need for which is very apparent, leads me to suggest that the best time for such establishment is when the streets are made public.

At such times there ordinarily would be no necessity for moving existing structures, and the advantage accruing to the owners of the property by having the streets made public should offset in large measure, if not entirely, any losses due to the building restrictions which are imposed upon the lands.

### TARVIA.

The application of the product of coal tar distillation, known as Tarvia, to macadamized roads for the purpose of laying the

dust, is to be tried during the coming year. This method has recently been used in a number of cities, and is said to have been very satisfactory.

Material sufficient to treat about 8,000 square yards of macadam surface is now stored in the Summer street yard.

### SIDEWALKS AND CURBING.

Sidewalk work has been done in twenty-four streets, in accordance with orders of the City Council.

The setting of curbing in Chestnut, Franklin, and Norfolk streets was started during the year, but was suspended pending final action by the City Council on petitions relating to changes in the locations thereof.

### WATERING STREETS.

In accordance with orders of the City Council, 83.68 miles of streets have been watered, an increase of .51 miles over that watered last year.

The same methods which have heretofore prevailed, namely, the use of watering carts and cars, have been followed. The carts are owned by the city. The teams and drivers are employed under contract, at the rate of \$90 per month. This amount is \$5 per month in excess of the rate paid last year, and was allowed on account of increased cost of teams, hay, grain, etc.

Two, and during a part of the season three cars of the American Car Sprinkler Company of Worcester, Mass., have been operated under contract.

A five year contract was made with the American Car Sprinkler Company on April 1, 1906, by which a discount of 5 per cent per annum is made from the price paid by the city last year for similar service. The approximate saving to the city by this arrangement amounts to \$500 annually.



### PAY OF FOREMEN.

By vote of the Board of Supervisors, October 30, 1905, the foremen in the employ of the Street Department have been guaranteed eight months' work during the summer season, at their daily rates of wages, and during the winter season they are each guaranteed one dollar per day, provided they report at the city yard. For any work done during the winter season they are paid at their usual daily rates of wages.

### CHANGES IN PAY FOR LABORERS AND DOUBLE TEAMS.

By order of the City Council, approved December 11, 1906, which order takes effect upon the date of passage, the laborers in the employ of the Street and Sewer Departments are to be paid \$2 per day of eight hours, instead of \$1.75 as heretofore. The pay for double teams has been raised from \$4.50 to \$6 per day.

### CONCLUSION.

It gives me pleasure to express thanks to Arthur H. Woodward, Assistant Superintendent of Streets.

I also very much appreciate the uniform courtesies extended during the year by Mayor Francke W. Dickinson, Alderman William E. Sanderson, and Councilman George D. Chamberlain, members of the Board of Supervisors of Highways and Bridges.

Respectfully submitted,

ARTHUR A. ADAMS,  
*Superintendent of Streets.*

BOARD OF ALDERMEN, December 31, 1906.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 31, 1906.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, January 1, 1907.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., January 1, 1907.

Approved.

FRANCHE W. DICKINSON, *Mayor.*

**MACADAM BUILT BY PRIVATE PARTIES.**

NAME OF STREET.	Limits.	Length in feet.	Area in sq. yds.
Medford street,	North Main st. to Birnie ave.,	624	2,080

**MACADAM REPLACED BY PAVING.**

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Fulton street,	Cypress street to Vine,	1,125	3,006
Hillman street,	Main street to Dwight,	647	1,801
Market street,	State street to Harrison ave.,	961	1,792
North Main street,	Carew street to Morgan,	830	4,500
Walnut street,	Lebanon street to Hancock,	490	780
		<hr/> 4,053	<hr/> 11,879

**GRANITE BLOCKS REPLACED BY WOOD BLOCKS.**

NAME OF STREET.	Limits.	Length in feet.	Area in sq. yds.
Main street,	Bliss street to William,	1,148	5,475

TABLE OF MACADAMIZED STREETS.

\* Includes Macadam laid by Spfd. Street Ry. Co.

\*\* Macadam laid by Spfd. Street Ry. Co.

† Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
† Agawam street,	Pecousic avenue to South st.,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Allen street,	Mill to Randall avenue,	2,253	*7,935
Allendale street,		663	2,094
Amherst street,	Harvard to Monmouth,	1,233	4,069
Andrew street,	State to Dawes,	1,323	4,228
Arbor street,		437	1,222
Armory street,	Federal to Warwick avenue,	2,305	7,688
Armory street,	Liberty to Cleveland,	1,119	3,698
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
† Avon place,		67	386
Bancroft street,		1,435	4,865
Barnes street,		180	561
Bay street,	St. James avenue to Cam- bridge street,	4,469	*14,853
Beech street,		528	1,303
Belmont avenue,	Woodside ave. to Oakland st.,	2,599	7,043
Belmont avenue,	Sumner avenue to White st.,		**3,700
Belmont avenue,	south side Garfield street to Sumner avenue,	1,624	4,170
Berkshire street,	State to Oak, I. O.,		**31,291
Bliss street,	Main to N. Y., N. H. & H. R. R.,	1,229	3,956
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Worth- ington street,	1,152	3,837
Boylston street,		1,807	864

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Bradford street,		862	2,985
Bridge street,	old toll bridge to Main, and Dwight to Chestnut,	817	3,009
Broad street,		959	3,177
Brookline avenue,		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,407
Catharine street,	Bay to Dartmouth,	150	493
Cedar street,		1,962	6,655
Central street,		4,903	12,832
Central street,	Cedar to Mill,		**2,705
Charles street,	Liberty to Franklin,	618	1,888
Chestnut street,	State to Worthington, and east side, Jefferson ave. to City Hospital,	3,064	7,501
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clark street,		619	1,100
Clarendon street,	north from Worthington,	204	674
Clinton street,		703	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court square ave.,	689	2,052
Cross street,	Willow to Maple,	608	1,416
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliott street,		1,007	3,342
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818	2,089
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Everett street,		1,500	4,859
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,	Talcott to Wason,	1,126	5,005
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,666
Forest street,		784	2,502
Forest Park avenue,	Sumner ave. to Forest street,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475
Fort Pleasant avenue,	west side,	2,794	10,138
Franklin street,	Main to Charles, and Cass to Webster,	2,531	8,781
Fremont street,		778	2,593
Fulton street,	Plainfield to Vine,	2,444	8,087
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
George street,	Maple easterly,	110	647
Grace street,		354	885
Grant street,		577	1,603
Gray's avenue,		560	1,300
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hancock street,	Florence to State,	3,429	*11,613
Harvard street,	Yale to Cornell,	1,565	5,206

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Hawthorn street,	Walnut to Sheffield st., and Alden street easterly,	540	1,374
Hebron street,		698	2,204
Hickory street,		3,341	8,547
High street,		2,563	5,544
Holyoke street,		776	2,001
Homer street,	N. Y., N. H. & H. R. R. to Main street,	582	1,940
Howard street,		1,277	4,326
Hubbard avenue,		568	1,063
Huntington street,		643	†2,143
Ingraham avenue,		258	462
James street,		928	2,356
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Kibbe avenue,		213	710
King street,			
	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,885	*9,507
Lafayette street,		568	1,865
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,659
Leyfred terrace,		625	2,102
Liberty street,	Main street easterly, and Wal- cott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chicopee line,		**9,920
Lillian street,		387	989
Linden street,		1,287	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Loring street,		707	2,294
Lyman street,	Chestnut to Spring,	734	2,544
Madison avenue,		529	1,657
Magazine street,	Lincoln to Armory,	734	2,434
Main street,	Mill river to Locust street,	980	5,864

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Main street, I. O.,	Front street to point 104 ft. east of Rogers ave.,	4,403	15,953
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George street,	1,565	4,572
Maplewood terrace,	southside, Fort Pleasant Ave. to Forest Park avenue,	1,301	3,075
Marble street,		1,074	3,508
Margaret street,	Water to Main,	842	2,807
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
Medford street,	N. Main st. to Birnie ave.,	624	2,080
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mulberry street,	Maple to Ridgewood place,	991	3,256
Myrtle street,		484	997
North street,	Carew to Waverly,	2,988	10,807
North Main street,	Morgan to Chicopee line,	6,285	32,680
Norwood street,		1,117	2,911
Oak street,		1,344	4,136
Oak street, I. O.,	Berkshire to Main,	1,097	4,051
Oak street, I. O.,	Berkshire to Main,		**2,078
Oakland street,	Belmont ave. to Allen street,	3,422	11,454
Olive street,		478	1,248
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow, and foot of hill to Maple,	865	2,545
Patton street,		1,631	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	South street to South street,	2,205	7,350
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344



TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Plainfield street,	B. & M. R. R. to Newland street, and Rowland ave. to Wason avenue,	3,079	8,646
Plainfield street,	Washburn to Wason avenue,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597
Portland street,	N. Main to Birnie avenue,	610	2,033
Princeton street,	Bay to St. James avenue,	1,500	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Prospect street,	Massasoit to Carew st. (incomplete),	817	2,996
Pyncheon street,		868	2,810
Quincy street,	Oak to Eastern avenue,	2,704	7,780
Ringgold street,		730	2,432
Rutland avenue,		277	926
Rutledge avenue,		516	1,500
Salem street,	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,278
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,520
Sharon street,		1,200	3,895
Sheldon street,	Birnie avenue to N. Main,	651	2,027
Sherman street,	State to Bay,	1,528	5,078
South street,	Agawam street to Mill river,	1,863	6,878
Spring street,		2,873	7,322
Springfield street,	Chestnut to dingle, and Hamburg street to Chicopee line,		**1,242
Spruce street,		699	1,737
State street,	Water to Main, City Library to Federal, Oak to Sherman, and Highland Div. N. Y., N. H. & H. R. R. to Berkshire street,	18,966	**67,971
Stearns square,	east of park,	259	461

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Stebbins street, St. James avenue,	Union to Quincy, State to Highland division N. Y., N. H. & H. R. R.,	186 5,470	621 15,557
St. James avenue, Stockbridge street,	State to end of track, east of Spring,	635 567	**5,213 1,617
Summer street, Summer street, Sumner avenue,	Federal to Armory, Longhill street to Forest Park entrance,	378 3,215	1,512 1,260 15,227
Sumner avenue, Sumner avenue,	Lenox st. to east line Dick- inson street, Longhill street to White,	484 413	4,254 1,310
Taylor street, Temple street, Tenth street,		953 1,577	2,570 4,451
Thompson street, Townasley avenue, Tyler street,		2,093 138 1,346	6,606 214 4,002
Union street,  Vernon street, Vine street, Vinton street,	Oak to Hancock, Water to foot of hill, Maple to School, and Mulberry to Eastern avenue,	6,088 823 745 612	20,247 1,952 1,892 2,465
Walnut street, Waltham avenue, Warriner avenue, Warwick street, Wason avenue,	Mill to Hancock street,  Heywood street easterly, B. & M. R. R. to North Main street,	1,457 985 450 811 505	*2,341 2,628 1,601 2,703 1,718
Wason avenue, Water street, Waverly street, Webster street, West street,	B. & M. R. R. to North Main street,    	5,145 850 606 1,195	**449 16,525 2,910 2,020 3,872

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Westminster street,		1,911	6,388
White street,	Allen to Orange,	1,800	3,505
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham road,	State to Homer street,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton street,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water street,	1,807	4,000
William street,	N. Y., N. H. & H. R. R. to Main,	1,868	4,359
Willow street,	Union to State,	895	2,493
Winthrop street,		659	2,397
Worcester street, I. O.,	Oak street to Fiberloid Co.'s driveway, 18 ft. in width,	4,494	8,988
Worthington street,	Water to Cook's ave., and Spring to St. James ave.,	3,830	5,375
Yale street,	Dartmouth to Monmouth,	1,493	5,142
York street,		1,000	2,997
Total,		299,867	1,047,394

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Belmont avenue,	Hall street westerly,	Catekill blocks,	1,382	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	483	1906
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1905
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.,	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson ave.,	Bitulithic,	825	2,898	1905
Court street,	Main to Court Square ave.,	{ Rock asphalt, { Syracuse brick,	317	1,277	1897
		{ Rock asphalt,	—	174	1897
		{ Syracuse brick,	193	503	1897
Court square avenue,	Court to Elm st.,	{ Rock asphalt,	—	330	1897
Cypress street,	Main street westerly,	Syracuse brick,	459	1,700	1904
Cypress street,	Boylston to Fulton,	Granite blocks,	216	848	1905
Dwight street,	State to Lyman,	Granite blocks,	2,324	9,905	1896
East Court street,	Main to Market,	Syracuse brick, Rock asphalt,	117	297	1900

TABLE OF PAVED STREETS—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Elm street,	Main to Court Square ave.,	{ Rock asphalt, { Syracuse brick,	843	949	1897
Fort street,	Main to Water,	Granite blocks,	—	330	1897
Fulton street,	Cypress to Vine,	Granite blocks,	670	1,770	1895
Hampden street,	Main street westerly,	Granite blocks,	1,125	3,006	1906
Hampden street,	completion, Main to Water,	Bitulithic,	212	821	1904
Harrison avenue,	Main to Dwight,	Bitulithic,	384	1,539	1905
Hillman street,	Main to Dwight,	Trinidad asphalt,	586	2,247	1896
Liberty street,	Chestnut to Cass,	Bitulithic,	648	2,025	1906
Liberty street,	Cass to Heywood ave.,	Syracuse brick,	1,399	4,571	1900
Lyman street,	Main to Chestnut,	Syracuse brick,	1,147	3,971	1901
Main street,	Locust to Marble,	Granite blocks,	1,805	4,599	1889
Main street,	Marble to William,	Syracuse brick,	840	4,381	1897
Main street,	William to Bliss,	Syracuse brick,	1,762	8,307	1896
		Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	1,150	6,460	1906
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	1,899	10,798	1904
Main street,	Worthington to Hampden, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	362	1,183	1904
Main street,	Worthington to Hampden, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	—	962	1903

TABLE OF PAVED STREETS—CONTINUED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Hampden to Lyman,	Creo-resinate wood bl'ks, 4" x 4" x 8",	153	775	1908
Main street,	Lyman to Liberty,	Creo-resinate grooved wood bl'ks, 4" x 4" x 8",	484	2,780	1908
Main street,	Liberty to Sharon, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	453	1,135	1908
Main street,	Liberty to Cypress, west side,	Granite blocks,	—	880	1890
Main street,	Cypress to Sharon, west side,	Granite blocks,	—	580	1891
Main street,	Sharon to Emery and Franklin,	Granite blocks,	545	2,920	1891
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,605	1897
Main street,	Emery to Sargeant, west side,	Catakill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catakill and Metropolitan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison ave.,	Bitulithic,	968	1,887	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Railroad street,	Main to Water,	Granite blocks,	516	1,539	1906
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900

TABLE OF PAVED STREETS—CONCLUDED.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
State street,	Main to library,	Granite blocks,	1,019	4,084	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	Sherman to Highland Div. N. Y., N. H. & H. R. R.,	Bitulithic,	820	4,352	1905
Summer street,	Autumn to Kibbe ave.,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,	Granite blocks,	787	2,635	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave., to Lebanon st.,	Bitulithic,	1,195	3,888	1905
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,334	1906
White street,	Allen to Orange,	Bitulithic,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Cook's ave.,	Bitulithic,	404	1,418	1905
<b>Total,</b>			<b>52,164</b>	<b>196,145</b>	

THIRTY-EIGHTH ANNUAL REPORT  
OF THE  
**SEWER DEPARTMENT.**

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SPRINGFIELD, MASS., December 28, 1906.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 10, 1906.

**RECEIPTS.**

By appropriation, . . . . .	\$28,000 00	
Sewer entrances, fees, . . . . .	7,206 82	
Sewer entrances, for labor and material, .	3,394 37	
From departments and private parties, bills rendered, . . . . .	985 85	
	<hr/>	\$39,587 04

**EXPENDITURES.**

**REGULAR.**

Building and connecting private drains, .	\$3,267 81	
City teams, uncredited balance, . . .	819 64	
City yard, . . . . .	1,167 60	
Engineering, . . . . .	312 84	
Materials on hand, . . . . .	133 12	
Office and general expenses, . . . . .	1,231 47	
Salary of first assistant superintendent, .	1,071 16	
	<hr/>	
Amount carried forward,	\$8,003 64	



Amount brought forward,		\$8,008 64	
Sewers,	{ cleaning, . . . . .	1,712 80	
	{ construction, . . . . .	21,952 67	
	{ flushing, . . . . .	2,159 04	
	{ repairs, . . . . .	2,943 80	
Supplies,	. . . . .	199 60	
Tools,	. . . . .	1,006 27	
Work and material billed departments,	. . . . .	664 72	
Work and material billed private parties,	. . . . .	337 98	
		<hr/>	
		\$38,980 02	
Unexpended balance,	. . . . .	607 02	
		<hr/>	
			\$39,587 04

## SPECIAL.

Mill River Valley Sewer :—			
Limit of expenditure,	. . . . .		\$97,572 65
Expended prior to December 10, 1905,	. . . . .	\$95,418 43	
Expended since December 10, 1905,	. . . . .	2,154 22	
		<hr/>	
			\$97,572 65

## BILLS RECEIVABLE.

Bills receivable, December 10, 1905,	. . . . .	\$419 10	
Bills committed, fiscal year, 1906,	. . . . .	705 71	
		<hr/>	
			\$1,124 81
Bills paid, fiscal year, 1906,	. . . . .	\$985 85	
Abatements,	. . . . .	59 01	
		<hr/>	
			1,044 86
			<hr/>
Bill receivable, December 10, 1906,	. . . . .		\$79 95

**SEWER CONSTRUCTION CLASSIFIED.**

izes vitrified clay pipe.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
10"	2,618'	507'	3,120'
12"	3,406'	1,306'	4,712'
15"	962'	581'	1,543'
18"	825'		825'
20"	553'		553'
24"	695'	395'	1,090'
Total,	9,054'	2,789'	11,843'

**SEWER CONSTRUCTION AND RECONSTRUCTION.****DESCRIPTIONS AND COSTS—FISCAL YEAR 1906.**

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Abbe avenue, Plainfield street west- erly .....	Clay	300 300 301 200	18" 15" 12" 10" }	\$1,405 16
Alden street, manholes .....	....	....	....	116 59
Amherst street, manholes .....	....	....	....	72 09
Ashley street, manholes and flush gate .....	....	....	....	101 08
Avon place, Maple street easterly ...	Clay	695	24"	3,359 45
Belmont avenue, flush gate .....	....	....	....	29 29
Bliss street, manhole .....	....	....	....	39 97
Broad street, manholes .....	....	....	....	160 44
Center street, I. O., extension Pine to Cedar street .....	Clay	349 300	12" 10" }	644 61
Central street, manholes .....	....	....	....	87 04
Clarendon street, St. James avenue to Sherman street, relaying ...	Clay	280 605	15" 12" }	1,340 27
College avenue, flush gate .....	....	....	....	37 94
Davis court, Bridge street to Harri- son avenue .....	Clay	450	12"	500 67
Emery street, manhole .....	....	....	....	36 78
Essex street, I. O., Oak street east- erly .....	Clay	183	10"	224 87
Farnsworth street, Hamburg street northeasterly, incomplete .....	Clay	186	20"	606 11
Florence street, manholes .....	....	....	....	158 43

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Franklin street, extension to Genesee street .....	Clay	27	12"	\$57 66
Fulton street, manholes.....	....	....	....	80 46
Genesee street, Franklin street southeasterly .....	Clay	200	10"	234 87
George street, flush gate .....	....	....	....	12 07
Granada terrace, Ventura street easterly .....	Clay	76	12"	52 72
Granville street, manhole .....	....	....	....	41 44
Gray's avenue, manhole.....	....	....	....	39 86
Green street, manholes .....	....	....	....	143 33
Hall street, manholes.....	....	....	....	86 64
Hamburg street, Springfield street easterly .....	Clay	367 235	20" 10" }	1,067 20
Hampden street, manhole.....	....	....	....	50 67
Hampden street, I. O., flush gate...	....	....	....	36 59
Hawley street, manhole.....	....	....	....	28 52
Hickory street, flush gate .....	....	....	....	29 06
Homer street, flush gate.....	....	....	....	24 42
Ingersoll grove, manhole.....	....	....	....	35 80
John street, manhole.....	....	....	....	36 34
Keith street, manholes .....	....	....	....	88 22
*King street, Westford avenue to Wilbraham avenue .....	Clay	427	10"	321 81
King street, manhole.....	....	....	....	23 52
Lyons street, I. O., manhole.....	....	....	....	36 62

\* Sanitary sewer.

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Magnolia terrace, flush gates .....		....	....	\$42 16
Main street, Mill River to Mill street	Clay	258	10"	342 25
Malden street, flush gate .....		....	....	25 75
Manhattan street, manhole .....		....	....	35 91
Maple street, extension southerly to Maple avenue .....	Clay	784	12"	1,289 58
Marengo park, flush gate .....		....	....	95 25
Market street, Sanford street to Har- rison avenue, relaying .....	Clay	301 350	15" 12" }	1,197 73
Massasoit street, manhole .....		....	....	82 18
Monroe street, manholes .....		....	....	142 77
Mountainview street, flush gate .....		....	....	28 19
Oak street, manhole .....		....	....	40 59
Palmer avenue, flush gate .....		....	....	24 99
Park street, Main to Willow street, relaying .....	Clay	395	24"	1,609 81
Pendleton avenue, manhole .....		....	....	60 78
Portsmouth street, Eastern avenue easterly .....	Clay	212	12"	213 06
Quebec street, I. O., Lyons street easterly .....	Clay	209	15"	402 83
Queen street, manhole .....		....	....	39 54
Quincy street, manholes .....		....	....	105 41
Reed street, manholes .....		....	....	81 71
Richelieu court, flush gate .....		....	....	21 99
Sachem street, Dickinson street northerly .....	Clay	330	10"	345 81

## CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in feet.	Size.	Cost.
t, manhole .....		....	....	\$29 32
et, extension northerly	Clay	67	10"	37 29
enue, manhole.....		....	....	44 58
t, extension easterly...	Clay	154	15"	201 94
, manholes.....		....	....	63 56
t, manholes, .....		....	....	144 29
enue, extension south- .....	Clay	365	12"	329 69
reet, manhole.....		....	....	30 08
venue, Westford circle to street.....	Clay	541	12"	454 36
Gordon street to Daw- venue.....	Clay	192	10"	187 69
flush gate.....		....	....	21 89
nue, Sumner avenue to ellow terrace .....	Clay	301 299 301 221	18" 15" 12" 10" }	1,261 63
et, Main to Dale street, ig.....	Clay	351 288	12" 10" }	906 35
et, manhole and flush .....		....	....	63 14
t, Union street to Hub- venue, relaying.....	Clay	219	10"	204 39
street, I. O., extension ly of Pine street.....	Clay	224	18"	344 66
		11,843		\$21,952 67

er.

costs of the above described sewers include the costs of manholes and gates.

## SEWERS ABANDONED—1906.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Clarendon street, St. James avenue to Sherman street.....	Cem.	885	12"	\$1,336 35
Maple street, Maple avenue north- erly.....	Cem.	838	12"	496 56
Market street, Sanford street to Har- rison avenue .....	Cem.	549	15"	687 65
		154	12"	154 47
Park street, Main to Willow street ..	Cem.	353	18"	419 95
	Clay	42	18"	171 59
William street, Main to Dale street..	Cem.	638	12"	599 72
Willow street, Union street to Hub- bard avenue .....	Cem.	220	15"	302 23
		3,169		\$4,170 52

## SUMMARY.

DESCRIPTION.	Length in Feet.	Cost.
Clay pipe sewers built by regular appropriation .....	11,843	\$19,145 45
Flush gates and manholes built by regular appro- priation.....		2,807 22
	11,843	\$21,952 67
Sewers abandoned.....	3,169	4,170 52
Net addition carried to sewer table.....	8,674	\$17,782 15

## SEWER CLEANING AND REPAIRS.

	COST OF	
	Cleaning.	Repairs.
Alden street, . . . . .	\$14 31	
Avon place, . . . . .		\$73 20
Belmont avenue, . . . . .		32 00
Bowdoin street, . . . . .	19 43	18 42
Broad street, . . . . .		15 30
Buckingham street, . . . . .	19 10	
Carew street, . . . . .	43 55	
Cass street, . . . . .		26 35
Cemetery brook, . . . . .		13 00
Clarendon street, . . . . .	13 25	
Clinton street, submerged outlet, . . . . .	16 93	
Crystal avenue, . . . . .	18 53	
Douglas street, . . . . .		45 84
Elm street, submerged outlet, . . . . .	18 02	
Fisk avenue, . . . . .		20 52
Florence street, . . . . .	35 01	
Forest Park avenue, . . . . .		24 86
Forest street, . . . . .		16 90
Fort Pleasant avenue, . . . . .	20 67	
Fulton street, . . . . .	22 65	
Garden Brook, . . . . .	292 04	
Granville street, . . . . .	16 18	
Green street, . . . . .	28 22	
Grover street, . . . . .	37 87	
Hampden street, . . . . .	14 62	
Hawley street, . . . . .	10 28	
Hillman street, . . . . .		14 96
Ingersoll Grove, . . . . .	19 26	
John street, . . . . .	11 50	
Keith street, . . . . .	12 37	
King street, . . . . .	76 70	
Knox street, . . . . .		11 36
Linden street, . . . . .		14 83
Locust street, . . . . .	17 34	
Lowell street, . . . . .	85 50	



## SEWER CLEANING AND REPAIRS.—CONTINUED.

	COST OF	
	Cleaning	Repairs.
Magnolia terrace, . . . . .		\$27 83
Main street, . . . . .	\$323 87	
Main street, I. O., . . . . .		1,020 40
Manhattan street, . . . . .	19 00	
Marengo Park, . . . . .		16 23
Mill street, . . . . .	15 07	42 22
Monroe street, . . . . .	40 37	
Mountainview street, . . . . .	24 79	
Oak street, . . . . .	29 76	
Oak street, I. O., . . . . .	28 88	
Pine street, . . . . .		445 14
Plainfield street, . . . . .		12 21
Plymouth street, . . . . .	15 03	
Queen street, . . . . .	19 60	
Quincy street, . . . . .	12 98	
Sanford street, . . . . .	15 75	
Sewer connections, . . . . .		43 38
State street, . . . . .		30 06
Sundry sewers, costing less than \$10.00, . . . . .	140 14	289 89
Town Brook, filling between Crossett avenue and Union street, . . . . .		233 82
Tyler street, . . . . .	29 12	
Union street, . . . . .	58 74	
Walnut street, . . . . .	11 76	11 20
Water street, . . . . .		29 65
Wellesley street, . . . . .	19 00	
West Brook, filling north of and rebuilding south of Summer street, . . . . .		246 80
Willow street, . . . . .	22 87	
Worthington street, submerged outlet, . . . . .	22 24	
Worthington street, . . . . .		172 41
	<b>\$1,712 80</b>	<b>\$2,943 80</b>

## GENERAL DESCRIPTIONS.

The work of the Sewer Department has been done entirely by departmental labor. The total length of new sewer construction is 9,054 feet, and 2,789 feet of sewers have been relaid.

### FILLING OF TOWN BROOK.

The Town brook, lying under and near the easterly sidewalk of Main street, has been filled between Crossett avenue and Union street, the condition of the brook structure having become defective. The brook was practically abandoned as a carrier of sewage and surface water a number of years ago. The cost of filling amounted to \$233.82.

### PINE STREET AND MAIN STREET, INDIAN ORCHARD, SEWER REPAIRS.

It was found upon examination that the bottoms of the Pine street sewer between Maple and Mill streets, and the Main street sewer, Indian Orchard, between Oak street and the Chicopee river, were defective, and these have been repaired by spreading a layer of Portland cement mortar on the inside bottoms of both sewers at a cost of \$438.76 and \$1,020.40 respectively.

Previous work of similar nature has satisfactorily withstood the wear of sewage flow, and it is expected that for a number of years, at least, there will be no necessity for extensive repairs to the sewers so treated.

### WEST BROOK DISCONTINUANCE.

The West brook, so-called, has been diverted into the Summer street sewer, and has been discontinued northerly thereof, over land recently acquired by the city for yard purposes.

This part of the structure would otherwise have required extensive repairs, and it might have interfered with future building operations on the property.

### AUTOMATIC FLUSH TANKS.

Two automatic sewer flushing appliances have been purchased from the Pacific Flush Tank Company of Chicago, one of which has been installed at the end of the Marengo Park sewer, and with one exception has operated successfully. The shallow depth of the extremities of the pipe sewers ordinarily does not admit of the placing of these devices, but if in future operations the sewers could be built at a greater depth, it would be well to install more automatic tanks to determine any economies resulting from their use.

### DEFECTIVE SEWERS.

The pipe sewers in Forest Park avenue, Marengo Park and Magnolia terrace, built ten to fifteen years ago by private parties, have required a number of repairs during the year owing to their defective condition, and, as the capacity of some of them is insufficient, it seems probable that they will have to be renewed in the near future.

Numerous cement pipe sewers, some of which were built by private parties, are also defective and will require rebuilding.

The Union street trunk sewer easterly of Main street, built about forty years ago, is in very defective condition and should be rebuilt. The single ring of brickwork, laid in lime mortar, possesses little strength and is badly worn on the bottom. Between Main and Dale streets its depth is insufficient to properly supply the needs of the locality.

## SURCHARGED SEWERS.

At times of heavy rain it has been apparent for a number of years that numerous sewers about the city have been unable to properly provide for the flow of storm water.

On September 12, 1906, a storm at the rate of about two inches per hour for a period of twenty minutes caused considerable damage in the southerly section of the city. Water spurted from the perforated manhole covers in Belmont avenue hill, and the manhole covers in Fort Pleasant avenue were dislodged from their rims by the force of water in the manholes, showing conclusively that these two sewers have insufficient carrying capacity at times of heavy rains.

Boards which had been whitewashed were attached vertically to manholes in various parts of the city, in order that the head under which the sewers were running at times of storm might be recorded. These have shown that some sewers have been heavily surcharged, and require enlargement in order to furnish proper sewerage facilities. On this account petitions have been circulated and have been signed by interested property owners, asking for relief from flooding of cellars on various streets.

## RECEIVING BASINS.

The outlets to the receiving basins connected with the sewers tributary to the Pine street system, and a few other basins, have been reduced from eight inches to four inches in diameter by the insertion of short lengths of pipe, in order to retard the flow of surface water to the sewers, thus preventing the backing up of storm water into cellars of houses connected with the sewer system. Since this has been done no reports of cellar flooding have been received in this office from this section of the city.

Conclusive proof of the success of this measure, however, may not be had for a year or two.

#### SEWERS ORDERED BY THE BOARD OF ALDERMEN.

The estimated cost of sewer work ordered by the Board of Aldermen, and remaining unfinished at the close of the fiscal year, is practically \$40,875.

#### FIRST ASSISTANT SUPERINTENDENT.

The position of First Assistant Superintendent, made vacant by the death of Michael Roane, and referred to in my last annual report, has been filled by Howard O. Buck, whose appointment to the position was approved by the Board of Aldermen on March 12, 1906. Since this date Mr. Buck has had general oversight of the work of the Department, for which I thank him.

#### CONCLUSION.

It gives me pleasure to express thanks to the members of the Committee on Sewers and Drains, Aldermen W. A. Ford, William S. Warriner and William E. Sanderson for the uniform courtesies they have extended during the year.

Respectfully submitted,

ARTHUR A. ADAMS,  
*Superintendent of Sewers.*

BOARD OF ALDERMEN, December 31, 1906.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 31, 1906.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, January 1, 1907.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., January 1, 1907.

Approved.

FRANCKE W. DICKINSON, *Mayor.*

# CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO DECEMBER 10, 1906.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly.	301	15"	Clay	\$497.38
	275	12"	"	
Plainfield st., westerly.....	300	18"	"	1,405.16
	300	15"	"	
	301	12"	"	
	200	10"	"	
Acushnet avenue, Main street, easterly.....	294	20"	"	\$1,902.54
	279	18"	"	
	271	15"	"	
	26	12"	"	
Adams st., Main st. to Town brook.....	149	18"	"	323.33
Town brook, easterly.....	890	....	Brick	66.68
Richelieu st., westerly.....	237	12"	Clay	304.12
Alden st., Hancock to East- ern ave.....	595	18"	Cem.	1,646.13
	820	15"	"	
Eastern ave., to Wilbraham ave.....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	"	250.86
				2,808.38
Alderman st., Dickinson st., easterly.....	296	18"	"	916.78
	304	15"	"	
	300	12"	"	
	137	10"	"	
Alexander street, North street, easterly.....	288	10"	"	188.48
Alfred st., Birnie ave., easterly.	377	10"	"	.....
Allen ave., Allen st., easterly.	338	10"	"	233.73
Allen st., Mill river to Oakland st. ....	216	24"	"	576.86
Mill st. to Oakland st.....	365	10"	"	447.19
Oakland st. to Plumtree rd..	686	24"	"	1,832.06
	383	18"	"	1,598.59
	474	15"	"	
	580	12"	"	
	1,603	12"	"	
	1,401	10"	"	881.58
				984.62
				6,330.90
Allendale st., North st., easterly.	272	12"	"	401.43
	340	10"	"	
Amaron st., State st., southerly	349	10"	"	222.90

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Amherst street, Harvard street, northerly .....	441	12"	Cem.	\$146.99
	25	10"	Clay	23.78
Princeton to Monmouth st..	512	12"	"	622.90
	191	10"	"	
				\$793.67
Andrew st., State st., northerly	463	20"	"	1,753.67
	422	18"	"	
	382	12"	"	
Arbor st., Butler to Carew st..	398	12"	"	318.05
Arch st. (see Garden brook).				
Armory Hill Sewer (see private ways).				
Armory st., Worthington st., southerly.....	570	15"	Cem.	658.06
Summer st, southerly.....	374	12"	"	384.78
	325	10"	"	193.87
B. & A R. R. to Liberty st.	690	15"	"	1,165.47
	360	12"	"	
	271	10"	"	
Liberty to Sullivan st.....	450	1'-10" x 2'-9"	Brick	2,439.42
	476	1'-8" x 2'-6"	"	
Sullivan to Carew st.....	156	24"	Clay	975.77
	267	20"	"	
	290	12"	"	
Carew st., northerly .....	283	8"	"	107.71
Springfield st., southerly...	31	20"	"	317.00
	146	18"	"	
				6,242.08
Ashley st., Cedar st., easterly	65	18"	"	80.45
	580	15"	"	1,555.00
	697	12"	"	
				1,635.45
Atwater Terrace road, Green lane, westerly .....	322	20"	"	.....
	199	18"	"	
Auburn st., Fulton st., easterly	397	12"	"	655.06
	335	10"	"	
Autumn st., Summer to Worth- ington st.....	239	15"	"	715.29
Avon place, Maple st., easterly	695	24"	"	3,359.45
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4" x 5'-0"	Brick	8,914.04
including Chestnut st., Ban- croft to Montmorenci st..	379	3'-2" x 4'-9"	"	
Montmorenci st., Chestnut st., easterly.....	43	3'-2" x 4'-9"	"	
Bay st., St. James avenue to Pleasant st.....	250	15"	Clay	715.01
	245	12"	"	
	228	10"	"	



# CITY OF SPRINGFIELD,

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				984.62
				6,320.90
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Armory Hill Sewer (see private ways).				
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	476	1'-8" x 2'-6"	"	
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	290	12"	"	
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Springfield st., southerly...	31	20"	"	317.00
	146	18"	"	
				6,242.08
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	580	15"	"	1,555.00
	697	12"	"	
				1,635.45
Atwater Terrace road, Green lane, westerly .....	322	20"	"	.....
	199	18"	"	
Auburn st., Fulton st., easterly	397	12"	"	655.06
	335	10"	"	
Autumn st., Summer to Worth- ington st.....	239	15"	"	715.29
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Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4" x 5'-0"	Brick	8,914.04
including Chestnut st., Ban- croft to Montmorenci st..	379	3'-2" x 4'-9"	"	
Montmorenci st., Chestnut st., easterly.....	43	3'-2" x 4'-9"	"	
Bay st., St. James avenue to Pleasant st.....	250	15"	Clay	715.01
	245	12"	"	
	228	10"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Florida to Pleasant st..	235	12"	Clay	\$321.02
Florida to Sherman st .....	304	20"	"	1,092.89
	877	18"	"	
	812	15"	"	945.16
Sherman to Clarendon st...	151	8"	Cem.	46.82
Catharine to Clarendon st...	194	10"	Clay	200.66
Bowles to Cambridge st.....	1,037	2'-8" x 4'-0"	Brick	8,056.62
	360	2'-2" x 3'-3"	"	
Cambridge st., easterly....	247	8"	Clay	61.87
Beacon st., Eastern ave. to				\$11,440.05
Colton st .....	250	10"	"	119.31
Colton st., easterly .....	124	8"	"	8.65
				122.86
Beaudry st., I. O., Main st.,	300	12"	"	745.95
southerly .....	270	10"	"	
Beaumont st., Belmont ave.,				403.87
northerly .....	250	12"	"	
	431	10"	"	....
Becket st., Arch to Hooker st.	1,048	24"	"	
Beech st., Central st., northerly.	410	10"	Cem.	95.58
Beechwood ave., Sumner to				19.09
Spruceland ave. ....	595	12"	Clay	
Belgrade place, Walnut st.,				....
westerly .....	220	8"	"	
	140	6"	"	....
Bellevue ave., Belmont ave.,				
easterly .....	300	18"	"	
	300	15"	"	....
	194	12"	"	
Dickinson st., westerly ...	744	10"	"	....
Belmont avenue, Fort Pleasant				93.92
ter., easterly .....	90	10"	"	
Mill river to Woodside ter..	954	20"	"	2,698.67
Woodside ter. to Litchfield st.	660	2'-0" x 3'-0"	Brick	11,750.19
	445	1'-10" x 2'-9"	"	
	595	1'-8" x 2'-6"	"	
	550	1'-6" x 2'-3"	"	
Litchfield street to Kenwood				1,451.53
Park .....	432	20"	Clay	
	493	18"	"	871.69
Kenwood Park to Sumner ave	301	15"	"	
	403	12"	"	8,216.97
	616	10"	"	
Sumner ave., southerly .....	830	3'-4" x 5'-0"	Brick	25,062.97
	819	3'-0" x 4'-6"	"	
Belmont court, Belmont ave.,				148.76
southerly .....	216	10"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Benton st., State st., southerly.	301	12"	Clay	\$513.96
	300	10"	"	
	247	8"	"	
	320	8"	"	
Berkeley st., Princeton to Monmouth st. ....	483	12"	"	\$933.64
Berkshire st., I. O., .....				517.22
Oak to Myrtle st. ....	701	12"	Cem.	946.21
Oak st., easterly .....	326	12"	Clay	305.51
Chestnut st. to Myrtle st ...	577	12"	"	545.74
				1,797.46
Besse place, Main st., westerly.	290	10"	"	....
Birnie avenue, Wason avenue, northerly .....	362	24"	"	579.11
Wason ave., southerly .....	350	18"	"	1,024.75
	417	15"	"	
Worcester street extension, northerly to Grace st. ....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st. ...	144	12"	"	....
Douglas st., northerly .....	292	24"	Clay	1,149.93
	303	20"	"	
	304	15"	"	
	144	10"	"	
Douglas st. to Thomas st. ...	373	1'-10" x 2'-9"	Brick	1,319.73
Thomas st., southerly .....	312	20"	Clay	768.74
	316	18"	"	
				4,842.26
Bliss st., from Main to N. Y., N. H. & H. R. R. ....	1,284	12"	Cem.	1,190.68
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) .....	203	12"	"	....
Bond st., Garden Brook sewer to Chestnut st. ....	341	2'-0" x 3'-0"	Brick	1,580.25
	959	24"	Clay	2,195.84
				3,776.09
Bowdoin st., Worthington st., southerly .....	673	15"	Cem.	740.00
Worthington to Ingersoll gr. .	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight,	752	15"	"	1,058.67
Pease st., northerly .....	275	8"	Clay	35.77
Boylston st., Cypress to Clinton street .....	610	18"	Cem. }	1,094.44
	346	15"	" }	1,638.72
Brace street, Belmont avenue, northerly .....	137	10"	Clay	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Florida to Pleasant st..	235	12"	Clay	\$321.02
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	812	15"	"	945.16
Sherman to Clarendon st...	151	8"	Cem.	46.82
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Becket st., Arch to Hooker st.	1,048	24"	"	....
Beech st., Central st., northerly.	410	10"	Cem.	95.58
Beechwood ave., Sumner to				
Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut st.,				
westerly.....	220	8"	"	
	140	6"	"	....
Bellevue ave., Belmont ave.,				
easterly.....	300	18"	"	
	300	15"	"	....
	194	12"	"	
Dickinson st., westerly ...	744	10"	"	....
				....
Belmont avenue, Fort Pleasant				
ter., easterly.....	90	10"	"	93.92
Mill river to Woodside ter..	954	20"	"	2,698.67
Woodside ter. to Litchfield st.	660	2'-0" x 3'-0"	Brick	
	445	1'-10" x 2'-9"	"	
	595	1'-8" x 2'-6"	"	11,750.19
	550	1'-6" x 2'-3"	"	
Litchfield street to Kenwood				
Park .....	432	20"	Clay	
	493	18"	"	1,451.53
Kenwood Park to Sumner ave	301	15"	"	
	403	12"	"	871.69
	616	10"	"	
Sumner ave., southerly.....	830	3'-4" x 5'-0"	Brick	
	819	3'-0" x 4'-6"	"	8,216.97
				25,062.97
Belmont court, Belmont ave.,				
southerly.....	216	10"	Clay	148.76

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Benton st., State st., southerly.	301	12"	Clay	\$513.96
	300	10"	"	
	247	8"	"	
	320	8"	"	
Berkeley st., Princeton to Monmouth st.....	483	12"	"	\$933.64
Berkshire st., I. O.,.....				517.22
Oak to Myrtle st.....	701	12"	Cem.	946.21
Oak st., easterly.....	326	12"	Clay	305.51
Chestnut st. to Myrtle st ...	577	12"	"	545.74
				1,797.46
Besse place, Main st., westerly.	290	10"	"	....
Birnie avenue, Wason avenue, northerly.....	362	24"	"	579.11
Wason ave., southerly.....	350	18"	"	1,024.75
	417	15"	"	
Worcester street extension, northerly to Grace st. ....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st....	144	12"	"	....
Douglas st., northerly.....	292	24"	Clay	1,149.93
	303	20"	"	
	304	15"	"	
	144	10"	"	
Douglas st. to Thomas st....	373	1'-10" x 2'-9"	Brick	1,319.73
Thomas st., southerly.....	312	20"	Clay	768.74
	316	18"	"	
				4,842.26
Bliss st., from Main to N. Y., N. H. & H. R. R. ....	1,284	12"	Cem.	1,190.68
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).....	203	12"	"	....
Bond st., Garden Brook sewer to Chestnut st.....	341	2'-0" x 3'-0"	Brick	1,580.25
	959	24"	Clay	2,195.84
				3,776.09
Bowdoin st., Worthington st., southerly .....	673	15"	Cem.	740.00
Worthington to Ingersoll gr..	819	12"	"	758.64
				1,498.64
Bowles st., Bay to McKnight,	752	15"	"	1,058.67
Pease st., northerly.....	275	8"	Clay	35.77
Boylston st., Cypress to Clinton street.....	610	18"	Cem. }	1,094.44
	346	15"	" }	1,638.72
Brace street, Belmont avenue, northerly .....	137	10"	Clay	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bradford st., North Main to Fulton st.....	352	15"	Cem. }	\$1,301.99
	758	12"	" }	
Bridge st., Main st. to Conn. River.....	798	12"	"	\$718.79
	275	15"	Clay	429.14
Main to Chestnut st.....	1,158	2'-0" x 3'-0"	Brick	5,414.20
				<hr/> 6,562.13
Broad st., Hanover to Main st. Brookline avenue, North st., easterly.....	970	15"	Cem.	1,401.19
	328	12"	Clay }	29.57
	171	10"	" }	
Brown st., Yale to Bay st.....	483	10"	Cem. }	357.65
	21	8"	" }	
Buckingham place, Bay street, westerly.....	235	10"	Clay	168.97
Buckingham st., Bay to Claren- don st.....	651	12"	"	597.24
Bay st., southerly.....	35	12"	Cem. }	
State to Bay st.....	305	18"	Clay }	1,158.40
	345	15"	" }	
	675	12"	"	<hr/> 1,755.64
Burr st., Andrew st., easterly..	570	12"	"	428.83
Butler st., Chestnut to Cass st.	1,268	20"	"	2,021.96
Cass st., easterly.....	321	20"	"	520.71
				<hr/> 2,542.67
Calhoun st., North Main to North st.....	853	12"	"	681.40
North st., easterly.....	300	8"	"	227.19
				<hr/> 858.59
Cambridge street, Bay street, southerly.....	276	20"	"	1,100.88
	331	18"	"	
	266	15"	"	411.63
	302	12"	"	
	278	10"	"	<hr/> 1,512.51
Card-factory pond (see private ways).				
Carew st., Main st. to Garden brook (cost shown under Clinton st.).....	250	4'-6" x 6'-9"	Brick	....
	32	5'-0"	"	....
Garden brook to Prospect st.	1,456	4'-3" cir.	"	21,913.22
	1,257	3'-0" cir.	"	
	791	2'-8" cir.	"	671.51
Massasoit street, easterly...	580	18"	Cem.	
	200	12"	"	153.28

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Armory st. to Liberty st....	1,101	10"	Clay	\$787.87
	448	8"	"	
Cass st., Liberty to Franklin st.	500	12"	"	23,525.88
	163	10"	"	
Linden st., southerly.....	596	15"	"	892.07
Linden st., northerly.....	224	12"	"	
Catharine st., Dartmouth to McKnight st.....	833	2'-0"x3'-0"	Brick	4,428.92
State st. to McKnight st..	348	15"	Clay	1,348.95
	438	12"	"	
	333	10"	"	5,777.87
Cedar st., Pine to Walnut st...	180	3'-10"x5'-9"	Brick	889.35
	1,074	3'-8"x5'-6"	"	6,206.73
Pine st., westerly.....	378	12"	Cem.	288.32
				7,384.40
Cedar st., I. O., Main st. to river.....	433	2'-0"x3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	198.76
Cemetery brook (see private ways).				2,200.20
Center st., I. O., Oak to Pine st	463	12"	Cem.	510.73
Pine to Cedar st.....	349	12"	Clay	644.61
	300	10"	"	
				1,155.34
Central st., Main st., easterly..	99	15"	Cem.	147.60
	546	12"	"	385.49
Main to near Maple st....	527	2'-0"x3'-0"	Brick	2,275.08
	700	1'-8"x2'-6"	"	
near Maple street to Sterns terrace.....	769	18"	Clay	1,211.88
	105	12"	"	199.95
Sterns terrace to Cedar st...	334	18"	Cem.	102.50
Pine st., westerly.....	500	12"	Clay	568.42
Pine to Spruce st.....	339	12"	Cem.	376.00
	335	12"	Clay	514.05
	310	10"	"	
	861	20"	"	1,344.35
Spruce to Hancock st....	597	2'-0"x3'-0"	Brick	2,135.31
Hancock st. to Mill st.....	40	24"	Clay	136.83
Mill st. to Mill river. ....				9,397.46
Central st. place, Knox to Cen- tral st. ....	279	10"	Cem.	
	285	12"	"	197.64
				44.07
				241.71
Chapel street, Eastern avenue, easterly.....	400	10"	Clay	208.13



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Chase ave., Fort Pleasant ave., easterly .....	238	12"	Clay	\$24.49
	333	10"	"	
Charles st., Liberty st., northerly	654	12"	"	\$576.40
Liberty st., southerly .....	29	12"	"	12.94
Charter avenue, Walnut street, easterly .....	527	12"	"	589.34
Cherrelyn ave., Phoenix ave., southerly .....	300	15"	"	475.30
Cherry lane, Mill river to Cen- tral street .....	398	18"	"	410.62
	434	15"		
	251	12"		
	295	10"		
Cherryvale avenue, Long Hill st. to Florentine gardens.	596	10"	"	1,454.15
Chester st., Hancock to Central street .....	330	8"	"	15.74
Chestnut st., Edwards street, southerly .....	575	12"	Cem.	....
Mattoon st., southerly .....	288	15"	"	579.02
Pearl to Mattoon st. ....	313	1'-4"x2'-0"	Brick	319.69
Pearl to Bridge st. ....	143	1'-8"x2'-6"	"	445.40
Bridge to Worthington st. .	480	2'-0"	"	599.51
Worthington to Taylor st. .	60	18"	Cem.	....
	244	12"	"	291.17
Lyman st. to B. & A. R. R. .	134	18"	"	355.41
	72	12"	"	
Franklin st., southerly .....	500	12"	"	358.75
Franklin st., northerly .....	397	12"	"	294.14
Essex to Everett st. ....	374	15"	"	586.72
Carew st., southerly .....	126	8"	Clay	100.68
Carew to Prospect st. ....	424	24"	"	1,618.64
	537	20"		
Prospect st., northerly .....	220	12"	Cem.	178.88
Bancroft st., southerly .....	172	12"	"	123.00
	108	12"	Clay	190.55
	19	10"	"	
Bancroft to Montmorenci st. .	391	15"	Cem.	535.24
Bancroft st. to Montmorenci st. (see Bancroft st.) .....	....	3'-2"x4'-9"	Brick	....
Montmorenci to Waverly st. .	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly .....	450	10"	"	385.61
Douglas to Springfield (see Springfield st.) .....	....	3'-6"	Brick	....
Merwin st., southerly .....	178	10"	Clay	....
Eagle st., northerly .....	87	15"	"	....
Eagle st., southerly .....	171	10"	"	....
				8,021.65

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Chestnut st., I. O., Worcester to Hampden st. ....	342	15"	Cem.	\$340.25
	30	15"	Clay	55.26
Hampden to Berkshire st. . .	307	15"	"	342.65
Church st., Garden brook to North st. ....	556	18"	"	1,398.71
	80	15"	Cem.	157.23
Churchill st., Sumner ave. to Garfield st. ....	580	12"	Clay	84.12
	55	8"	"	6.89
				91.01
Clantoy st., Phoenix avenue, southerly. ....	398	15"	"	696.54
	253	12"	"	
Clarendon st., Worthington st., westerly. ....	205	10"	"	225.80
Worthington to St. James ave.	336	18"	Cem.	1,859.31
St. James ave. to Sherman st.	280	15"	Clay	
	605	12"	"	
Clark st., Hancock st., west- erly. ....	520	10"	"	531.80
Cleveland street, Armory to Liberty st. ....	274	18"	"	790.48
	250	15"	"	
	276	12"	"	
	284	10"	"	
Clifford st., Bay st., northerly.	250	12"	"	319.95
	119	10"	"	
Clifton avenue, Central street, southerly. ....	406	8"	"	82.10
Cliftwood ave., Sumner ave., southerly. ....	464	10"	"	....
Clinton st., Boylston st., east- erly. ....	410	12"	Cem.	441.52
submerged outlet. ....	176	24"	Wood	2,207.90
	24	24"	C. Ir'n	
Conn. river to Fulton st. . . .	593	4'-10" x 7'-3"	Brick	26,137.87
Fulton st., Clinton to Sar- geant street. ....				
Sargeant st., Fulton to Main street. ....				
Carew st., Main st. to Garden brook. ....				
(For lengths and sizes see individual streets.)				
College ave., State st. to Shat- tuck ave. ....	839	12"	Clay	139.62
Shattuck ave., northerly. ....	175	12"	"	37.94
				177.56

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
College st. State st. to Wilbraham road .....	34	12"	Clay	\$349.92
	443	10"	"	
Collins st., Eastern avenue to Logan st. ....	300	12"	"	457.04
	269	10"	"	
Colonial avenue, State street, southerly .....	326	12"	"	....
	348	10"	"	
Colton st., Wilbraham road to Beacon st. ....	448	18"	"	1,892.82
	569	15"	"	
	658	12"	"	
Columbia terrace, Liberty st., north and east .....	498	10"	"	....
Commonwealth ave., Belmont ave. to Washington street	441	24"	"	2,878.00
	500	20"	"	
	549	18"	"	
Congress st., Garden brook to Main st. ....	151	15"	Cem.	\$528.44
	221	12"	"	
Garden brook to Chestnut st.	183	20"	Clay	1,468.00
	198	18"	"	
	369	15"	"	
	288	12"	"	277.22
	119	15"	Cem.	
	76	10"	"	2,268.66
Continental ave., Sumner ave., southerly .....	215	12"	Clay	
	202	10"	"	27.45
Cook's ave., Worthington st. to N. Church ave. ....	117	15"	Cem.	573.84
N. Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	"	
Cornell st., Dartmouth terrace to Wellesley st. ....	185	15"	Clay	543.05
	374	12"	"	
Wellesley street, easterly ..	186	10"	"	208.20
Princeton st., westerly .....	52	10"	Cem.	47.30
	86	8"	Clay	88.04
Princeton st., easterly .....	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				1,136.84
Court st., Water st., easterly ..	273	12"	Cem.	226.15
Court Square ave., westerly ..	431	12"	"	553.45
Main st. to Court Square ave.	200	12"	"	309.67
				1,089.27

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cortland street, State street northerly .....	164	15"	Clay	\$672.01
	621	12"	"	
Crosby st., Walnut st., westerly	321	10"	"	231.38
Cross st., Main to Willow st...	388	18"	"	\$878.12
Willow st., easterly.....	363	12"	Cem.	311.56
				1,189.68
Crystal ave., Belmont avenue, easterly .....	251	15"	Clay	24.07
	250	12"	"	
	298	10"	"	
Cumberland st., Chestnut st., westerly .....	167	10"	"	125.29
North Main st., easterly ...	147	15"	"	182.77
				308.06
Cypress street, Conn. river to Garden brook in Ferry st.	1,466	3'-4"x5'-0"	Brick	13,629.35
Cypress avenue, Cypress street, northerly .....	360	12"	Clay	484.08
Dale st., northerly from sewer 60 ft. south of Hubbard ave	203	10"	"	157.30
Winthrop st., southerly. ...	46	8"	"	13.08
				170.38
Dartmouth st., St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick	8,247.06
Yale to Bowles st.....	295	2'-6"x3'-9"	"	
Dartmouth terrace, Worthing- ton st. to Cornell st.....	499	20"	Clay	2,213.06
	357	18"	"	
	177	15"	"	
Davis court, Bridge st. to Har- rison ave.....	450	12"	"	500.67
Dawes st., Bay st., southerly..	229	15"	"	165.40
	380	12"	"	
	518	10"	"	
Dawson avenue, White street, westerly .....	350	10"	"	95.87
Demond avenue, Fisk avenue, westerly .....	510	12"	"	608.57
Plainfield st., easterly .....	403	12"	"	
Dexter st., Knox to Pine st....	558	12"	Cem.	60.83
	226	10"	Clay	245.10
				305.93
Dickinson st., Mill st. to Sum- ner ave.....	35	4'-6" cir.	Brick	44,552.11
	60	2'-1"x5'-0"	"	
	231	5'-0" cir.	"	
	679	4'-0" cir.	"	
	460	4'-10"x7'-3"	"	
	869	4'-8"x7'-0"	"	
	1,040	4'-4"x6'-6"	"	
	996	4'-2"x6'-3"	"	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Chase ave., Fort Pleasant ave., easterly .....	238	12"	Clay	\$24.0
	333	10"	"	
Charles st., Liberty st., northerly	654	12"	"	\$576.40
Liberty st., southerly .....	29	12"	"	12.94
Charter avenue, Walnut street, easterly .....	527	12"	"	589.5
Cherrellyn ave., Phoenix ave., southerly .....	300	15"	"	435.2
Cherry lane, Mill river to Cen- tral street .....	398	18"	"	410.6
	434	15"	"	
	251	12"	"	
	295	10"	"	
Cherryvale avenue, Long Hill st. to Florentine gardens.	596	10"	"	1,461.1
Chester st., Hancock to Central street .....	330	8"	"	18.7
Chestnut st., Edwards street, southerly .....	575	12"	Cem.	579.02
Mattoon st., southerly .....	288	15"	"	319.69
Pearl to Mattoon st. ....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st. ....	143	1'-8"x2'-6"	"	599.51
Bridge to Worthington st. .	480	2'-0"	"	.....
Worthington to Taylor st. .	60	18"	Cem.	291.17
	244	12"	"	
Lyman st. to B. & A. R. R. .	134	18"	"	355.41
	72	12"	"	
Franklin st., southerly .....	500	12"	"	358.75
Franklin st., northerly .....	397	12"	"	294.14
Essex to Everett st. ....	374	15"	"	586.72
Carew st., southerly .....	126	8"	Clay	100.68
Carew to Prospect st. ....	424	24"	"	1,618.64
	537	20"	"	
Prospect st., northerly .....	220	12"	Cem.	178.88
Bancroft st., southerly .....	172	12"	"	123.00
	108	12"	Clay	190.55
	19	10"	"	
Bancroft to Montmorenci st.	391	15"	Cem.	535.24
Bancroft st. to Montmorenci st. (see Bancroft st.) .....	....	3'-2"x4'-9"	Brick	....
Montmorenci to Waverly st.	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly .....	450	10"	"	385.61
Douglas to Springfield (see Springfield st.) .....	....	3'-6"	Brick	....
Merwin st., southerly .....	178	10"	Clay	....
Eagle st., northerly .....	87	15"	"	....
Eagle st., southerly .....	171	10"	"	....
				8,021

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Monroe st., northerly . . . . .	29	12"	Cem.	\$51.50
	128	8"	Clay	90.66
				\$5,038.44
Edwards st., Chestnut street, easterly . . . . .	551	12"	Cem.	404.88
Elliott st., Salem st., southerly.	610	15"	"	730.48
	243	12"	"	309.08
				1,039.56
Elm st., submerged outlet. . . . .	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st. . . . .	385	3'-9" cir.	Brick	10,744.19
Water st. to Main st. . . . .	996	3'-8" x 5'-6"	"	
Elmwood st., Main st., west- erly . . . . .	300	18"	Clay	12,804.78
	249	15"	"	707.66
	50	12"	"	
Emery st., Boylston st., east and west. . . . .	542	12"	Cem.	616.36
Essex street, Garden brook, westerly . . . . .	418	15"	"	355.00
Garden brook to Chestnut st.	1,115	2'-2" x 3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
Essex st., I. O., Oak to Myrtle street. . . . .	254	12"	Clay	7,815.43
	145	10"	"	424.89
	281	10"	"	210.09
Oak st., easterly. . . . .	183	10"	"	224.87
				859.85
Everett st., Chestnut st. to brook brook to Cass st. . . . .	323	15"	"	308.39
	926	15"	"	821.43
Cass st., easterly. . . . .	....	....	....	104.35
				1,234.17
Euclid ave., Belmont ave. to Dickinson st. . . . .	389	12"	"	
	741	10"	"	1,102.00
	77	8"	"	50.67
*Dickinson st., westerly. . . . .	350	15"	"	773.10
	350	12"	"	
Dickinson st., easterly. . . . .	275	10"	"	807.83
				2,233.60
Fairbanks place, Worthington st., northerly . . . . .	249	10"	"	220.66
Fairfield street, Litchfield to Garfield st. . . . .	376	12"	"	....
	556	10"	"	351.64
†Farnsworth st., Hamburg st., northerly. . . . .	186	20"	"	351.64
Federal st., Worthington to Pearl st. . . . .	567	12"	Cem.	740.92

\* Surface drainage only.

† Incomplete.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Summer st., southerly.....	274	10"	Clay	\$172.00
				\$912.92
Ferry st., Main to Garden brook (see Cypress st.).....	.....	.....	.....	.....
Garden brook to Chestnut st.	1,168	2'-4" x 3'-6"	Brick	5,417.12
Firglade ave., Sumner ave. to Spruceland st.....	350 208	10" 8"	Clay " }	46.01
Spruceland to Pineywoods avenue.....	447 67	10" 8"	" "	....
				46.01
Fisk ave., Rowland to Worces- ter ave.....	272 275 298	24" 20" 10"	" " " }	1,078.11
Wason ave., southerly.....	299 294 248	24" 20" 12"	" " "	1,216.81
				2,269.92
Florence st., Pine st., easterly.	824 651	15" 12"	Cem. " }	2,227.38
Hancock st., easterly.....	283	10"	"	308.15
				2,530.53
Florentine gardens, Piney- woods ave., northerly.....	421	10"	Clay	22.83
Florida street, Worthington to Ingersoll grove st.....	273 561	15" 12"	Cem. "	359.06 528.88
Worthington to St. James ave	935	2'-2" x 3'-3"	Brick	4,499.10
St. James ave. to Bay st....	599	24"	Clay	1,832.21
Forest st., Belmont ave. to Forest Park ave.....	419 255	12" 10"	" " }	7,214.35 651.93
Forest Park ave., Fort Pleasant ave. to Garfield st.....	1,081 325 562	24" 20" 18"	" " " }	.... 1,217.48
Sumner ave., northerly.....	567	12"	"	123.15
Sumner ave., southerly.....	66 438	10" 10"	" "	.... 318.29
Pineywoods ave., northerly.	380	10"	"	33.87
				1,693.79
Fort st., Main to Water st....	633	12"	Cem.	633.48
Fort Pleasant ave., Mill river to Sumner ave.....	888 1,425	2'-4" x 3'-6" 2'-0" x 3'-0"	Brick " }	13,339.80
Mill st., southerly .....	428	12"	Clay	293.42
				13,633.22

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Franklin street, Garden brook sewer to Main st .....	434	18"	Cem.	\$555.27
Garden brook sewer to Chest- nut st.....	469	18"	"	1,834.76
	735	15"	"	
Chestnut to Charles st.....	273	15"	Clay	303.37
Charles st., easterly.....	670	12"	"	471.99
Cass st. to Webster st.....	621	12"	"	684.32
	70	10"	"	
Nursery st., westerly.....	207	15"	"	.....
Nursery st. to Genesee st...	107	15"	"	199.93
	557	15"	Cem.	....
	27	12"	Clay	57.66
				\$4,107.30
Fremont st., Main to Water st.	780	1'-6"x1'-7"	Brick	702.45
Main st., westerly.....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				1,424.25
Fulton st., Cypress to Clinton st.	944	12"	Cem.	826.66
Clinton to Sargeant st., (cost shown under Clinton st.)..	1,080	4'-8"x7'-0"	Brick	....
	42	4'-10"x7'-3"	"	....
Sargeant to John st.....	871	15"	Cem.	1,219.02
John st., northerly.....	314	12"	Clay	674.48
	408	10"	"	
Garden brook sewer (see pri- vate ways).				2,720.16
Gardner ave., Gardner street, northerly.....	151	8"	"	73.11
Gardner st., Hanover to Water street .....	655	2'-0"x3'-0"	Brick	1,995.23
Water to Main st .....	400	12"	Cem.	518.97
				2,514.20
Garfield st., Forest Park ave., easterly .....	556	15"	Clay	967.16
	514	12"	"	
Belmont ave., westerly.....	531	10"	"	329.87
				1,297.03
Genesee st., Franklin st., southerly .....	200	10"	"	234.87
George st., Dexter st., southerly	409	10"	"	344.52
Girard ave., Bay st. to Mc- Knight st.....	947	12"	"	711.13
Gordon st., Pasadena ave. to White st.....	618	15"	"	555.79
Grace st., Birnie ave., easterly.	274	15"	Cem.	51.56
Grand ave., Revere st., easterly	250	15"	Clay	....
	252	12"	"	
Revere st., westerly.....	151	10"	"	....
				....



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Grant st., Magazine to Armory street.....	588	12"	Cem.	\$439.38
Granville st., Eastern ave. to Logan st.....	495	12"	"	560.46
Gray's avenue, Cypress avenue, northerly.....	495	12"	"	460.92
Greene st., Hancock to Eastern ave.....	610	18"	"	1,897.68
	793	15"	"	
Green lane, Rimmon avenue, westerly and northerly...	744	12"	Clay	....
	143	10"	"	....
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	"	133.60
Greenwich st., Becket street, easterly.....	300	12'	"	467.79
	300	10"	"	
Greenwood st., Garden brook to Main st.....	386	12"	Cem.	2,231.69
Garden brook, easterly.....	538	15"	Clay	
	113	12"	"	
	452	12"	Cem.	
Grenada terrace, Dickinson st. to Ventura st.....	220	18"	Clay	\$708.45
	310	15"	"	
Ventura st., easterly.....	76	12"	"	52.72
Grosvenor st., North to Chestnut street.....	131	18"	Cem.	761.17
	648	15"	"	686.55
Grove st., North Main street, easterly.....	409	10"	Clay	442.65
North st., westerly.....	270	10"	"	
Grover street, Armory street to Liberty st.....	300	18"	"	898.06
	303	15"	"	
	298	12"	"	
	432	10"	"	
Hall st., Belmont ave. to Dickinson st.....	500	12"	"	904.55
	474	10"	"	
Hamburg st., Springfield st., easterly.....	367	20"	"	1,067.90
	235	10"	"	
Hampden st., Water street to Main st.....	569	15"	Cem.	762.57
Hampden st., I. O., Chestnut st., easterly.....	285	12"	"	187.28
	174	12"	Clay	299.12
Holly st., easterly.....	150	10"	"	165.26
				651.66

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hampshire st., I. O., Oak st., westerly .....	300	12"	Clay	\$633.59
	398	10"	"	
Oak st. easterly .....	250	12"	Cem.	206.20
Myrtle st., westerly .....	300	10"	Clay	278.62
Hancock street, Mill river to Central st. ....	920	12"	"	866.30
Central to Walnut st. ....	218	18"	Cem.	1,759.06
	1,343	15"	"	
Walnut to Alden st. ....	122	12"	"	88.00
Lebanon to Alden st. ....	827	2'-0" x 3'-0"	Brick	5,009.61
Walnut (through Lebanon) to Quincy st. ....	1,852	3'-6" x 5'-3"	"	21,668.02
Quincy to State st. ....	913	3'-4" x 5'-0"	"	
Hanover st., York st. to Gard- ner st. ....	830	2'-2" x 3'-3"	"	29,390.99
Harriet st., North Main st. to North st. ....	250	15"	Clay	377.17
	207	12"	"	
North st., easterly .....	330	10"	"	172.92
Harrison ave., Main st. to Chestnut st. ....	600	15"	Cem.	874.11
	250	8"	Clay	203.61
Harvard st., Yale to St. James ave .....	316	18"	"	967.94
	300	15"	"	
	291	12"	Cem.	266.84
St. James ave. to Cornell st..	736	12"	"	25.66
Hawley st., Wilbraham road to Monroe st. ....	181	12"	"	40.40
	330	10"	Clay	240.17
				280.57
Hawthorn st., Hancock street, westerly .....	441	12"	Cem	445.87
Hayden st., State st., northerly.	335	12"	Clay	24.11
	299	10"	"	
	222	8"	"	492.56
Hebron st., North to Chestnut st.	663	12"	"	
Hickory st., Mill river intercept- ing sewer to Alden st. ....	754	20"	"	2,446.84
	228	18"	"	
	184	15"	"	
	788	12"	"	
High street, Maple street to Ingraham ave. ....	523	18"	"	1,958.92
	567	15"	"	
	550	12"	"	
Ingraham ave., easterly ....	846	12"	"	945.32
				2,904.24

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hillman st., Main to Dwight st.	350	15"	Clay	\$1,436.30
	380	12"	"	
Hillside place, Richelieu court, easterly .....	106	8"	"	....
Holly st., I. O., Worcester to Hampden st .....	377	15"	"	419.11
Holyoke st., Main st., westerly.	734	12"	Cem.	928.06
Homer st., State st., southerly.	31	12"	Clay	87.00
	370	10"	"	
Hooker street, North Main st. to North st. ....	444	10"	Cem.	\$39.04
	255	10"	Clay	....
				39.04
Horace st., Dickinson street, northerly.....	363	12"	"	783.12
	411	10"	"	
Howard st., Main st., westerly.	344	15"	"	799.34
	321	12"	"	
Water st., easterly.....	312	12"	Cem.	389.14
Water st., westerly.....	350	12"	"	364.47
				1,452.95
Hubbard avenue, Main street, easterly .....	257	15"	Clay	630.47
	321	12"	"	
Hunt terrace, Allen street, northerly .....	304	10"	"	....
Huntington st., Becket street, easterly .. .....	300	12"	"	416.95
	300	10"	"	
Ingersoll grove, Worthington st., northerly.....	782	12"	Cem.	1,038.85
	218	8"	Clay	
Bowdoin st., easterly. ....	132	10"	"	106.53
Irrington ave., Sumner ave., southerly .....	300	12"	"	1,145.33
	100	10"	"	....
Jackson street, Sumner ave., southerly.....	460	10"	"	56.78
	140	8"	"	
Pineywoods ave., northerly.	281	10"	"	....
				56.78
James st., Cedar st., northerly.	289	15"	Cem.	924.36
	534	12"	"	
Jefferson ave., North Main st. to Chestnut st. ....	299	20"	Clay	1,663.86
	299	18"	"	
See private ways also.	276	15"	"	
	60	12"	"	
	414	12"	Cem.	492.50
	78	6"	Clay	37.89
				2,194.23

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
John st., Fulton to Plainfield st.	652	12"	Cem.	\$420.18
Johnson st., Dickinson st. to Pasadena ave .....	1,964	18"	Clay	3,756.87
Keith st., Belmont ave. to Dickinson st.....	551	12"	" }	1,106.40
	551	10"	" }	
Kensington ave., Oakland st., easterly.....	320	18"	"	493.42
Kenwood Park, Belmont ave., northerly.....	130	12"	" }	139.96
	1,127	10"	" }	
Kibbe ave., Summer st. to Worthington st.....	260	18"	"	552.92
King st., Walnut to Hancock st.	504	15"	Cem. }	\$921.37
	441	12"	" }	
Hancock to Eastern avenue	710	18"	" }	1,808.75
	686	15"	" }	
Eastern ave. to Logan st....	405	12"	" }	96.24
	72	10"	Clay }	
* Westford ave. to Wilbra- ham ave.....	427	10"	"	321.81
				3,148.17
Knox st., Mill river to Wind- sor st.....	1,115	15"	Cem. }	116.18
	198	12"	" }	
Ladd st., Eastern ave. to Logan st .. .. .	243	15"	Clay }	424.92
	304	12"	" }	
Lafayette st., St. James ave. to Amherst st .....	582	12"	" }	514.86
	21	10"	" }	
Laurel ave., Conn. river to Plainfield st .....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
				2,370.58
Laverne ave., Bellevue to Ma- rengo ave .....	211	10"	"	.....
Lebanon st. (see Hancock)...	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly.....	158	2'-0" x 3'-0"	"	1,495.77
Hancock to Eastern ave ...	606	18"	Cem. }	1,701.28
	816	15"	" }	
				3,197.05
Lenox street, Sumner avenue, southerly.....	465	10"	Clay	32.91
Lexington ave., Chestnut st. to Massasoit st.....	668	12"	"	516.31
Leyfred terrace, Belmont ave., northerly .....	300	18"	" }	957.30
	317	15"	" }	

\* Sanitary sewer.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Liberty st., Garden brook to				
Main st .....	118	12"	Clay	\$179.19
	70	1'-6" x 1'-7"	Brick	
	172	12"	Cem.	
Garden brook to Chestnut st.	967	15"	"	1,036.34
	171	8"	"	
Chestnut to Webster st. ....	784	2'-4" x 3'-6"	Brick	
	659	1'-10" x 2'-9"	"	9,123.49
	684	2'-2" x 3'-3"	"	
Webster to Armory st. ....	366	3'-0" x 4'-6"	"	
	1,282	2'-2" x 3'-3"	"	5,383.15
	317	1'-10" x 2'-9"	"	
	449	2'-2" x 3'-3"	"	2,539.81
Armory to Grover st. ....	1,194	24"	Clay	
	616	18"	"	3,126.37
Lillian st., Oak st., easterly ...	297	12"	"	<del>\$21,388.35</del>
Lincoln st., Magazine street to				232.47
Federal st. ....	823	12"	"	676.54
Linden st., Chestnut to Cass st.	470	18"	Cem.	
	862	15"	"	1,254.55
Litchfield st., Belmont ave. to				
Fairfield st. ....	159	15"	Clay	335.11
Garfield st., northerly. ....	69	6"	"	7.10
				342.31
Locust st., York to Mill st. ....	84	3'-0" x 4'-6"	Brick	
	364	2'-9" x 4'-11"	"	
	686	2'-6" x 3'-9"	"	6,804.18
Logan st., Ladd st., northerly.	88	10"	Clay	67.64
Granville st., northerly. ....	200	10"	"	147.48
				215.12
Lombard st., Water st., easterly.	500	12"	Cem.	344.69
Long Hill st., submerged outlet.	26	18"	Clay	
	290	18"	Wood	
	28	18"	C. I.	5,387.70
Conn. river to Washington				
avenue. ....	1,310	24"	Clay	2,066.09
(See Washington avenue.)	346	2'-4" x 3'-6"	Brick	1,936.97
Washington ave., northerly..	399	15"	Clay	
	185	12"	"	
	487	10"	"	953.28
Sumner ave., southerly. ....	356	8"	"	886.61
Warner pl. to Sumner ave. ....	423	10"	"	379.51
				11,130.16
Loring st., Water st., easterly.	650	12"	Cem.	750.33

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Lowell street, Conn. river to Plainfield st. ....	305	18"	Clay	\$986.21
	396	15"	"	
	396	12"	"	
	283	10"	"	
Lyman st., Main to Chestnut st.	1,335	2'-0" x 3'-0"	Brick	\$6,113.12
Chestnut to Spring st. ....	720	15"	Cem.	1,655.26
Lyons st., I. O., Main street, northerly. ....	261	18"	Clay	7,768.38
Madison avenue, Central street, northerly. ....	250	12"	"	737.57
	287	10"	"	
Magazine st., Worthington to Lincoln st. ....	682	18"	Cem.	1,103.19
	249	15"	"	
Magnolia terrace, east side, Sum- ner ave. to Spruceland ave.	586	8"	Clay	142.29
Spruceland ave. southerly. . .	90	8"	"	
west side, Sumner ave. to Spruceland ave. ....	622	8"	"	
overflow connection between east and west side. ....	62	8"	"	
Washington ave. to Spruce- land ave. ....	362	24"	"	26.00
	602	12"	"	21.08
Main st., Mill river to Mill st.	258	10"	"	342.25
Locust st., southerly. ....	800	15"	Cem.	1,430.27
York to B. & A. R.R. ....	56	7'-0", cir.	Brick	20,812.99
	1,772	6'-6", cir.	"	
	906	5'-6", cir.	"	
	990	5'-0", cir.	"	
	1,624	3'-4" x 5'-0"	"	34,453.56
	864	2'-4" x 3'-6"	"	
	263	12"	Clay	164.82
Emery st., southerly. ....	278	12"	"	389.20
Emery st. to Sargeant. ....	341	24"	"	2,539.81
	442	20"	"	
	480	18"	"	
	186	15"	"	
Main st., I. O., Chicopee river to Pine st. ....	2,321	2'-4" x 3'-6"	Brick	7,636.81
Pine to Cedar st. ....	500	18"	Cem.	870.78
	185	15"	"	128.49
	103	12"	Clay	
Cedar to Lyons st. ....	1,110	2'-0" x 3'-0"	Brick	5,024.19

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Lyons st., easterly.....	205	24"	Clay	\$1,334.58
	245	18"	"	
	139	12"	"	
Malden st., Allen st., southerly	542	15"	"	\$14,994.85
	291	12"	"	
	494	10"	"	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	"	862.70
	645	12"	"	
	205	10"	"	
Maple st., State to Temple st..	315	18"	"	675.51
	.....	.....	.....	51.55
Park to High st.....	225	18"	"	505.31
Union st., southerly.....	515	18"	Cem.	959.13
	135	12"	"	
	38	18"	"	
Central st., southerly.....	338	12"	"	160.95
	784	12"	Clay	1,389.58
Pine st., northerly.....	195	15"	Cem.	1,093.44
	522	12"	Clay	
Mapledell street, State street, northerly .....	337	15"	"	70.80
	300	12"	"	
	346	10"	"	
Maplewood ter., Fort Pleasant ave., easterly .....	682	15"	"	22.31
	329	12"	"	
	178	10"	"	
Marble st., Main st., easterly..	222	18"	Cem.	1,178.97
	586	15"	"	
	242	12"	"	
Marengo Park, Belmont ave., easterly .....	443	15"	Clay	95.35
	612	12"	"	
	778	10"	"	
Margaret st., Water st., westerly	520	12"	Cem.	507.30
Water st., easterly.....	858	12"	"	801.44
				1,308.74
Marion st., Bay st., southerly..	833	12"	Clay	795.45
Chapin st., easterly.....	94	10"	"	25.89
	319	8"	"	
				821.34
Market st., State st., northerly	119	10"	"	.....
Sanford st., southerly.....	200	12"	"	412.04
Sanford street to Harrison ave. ....	301	15"	"	1,197.72
	350	12"	"	
				1,609.76

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Mason st., State to Pease st..	349	15"	Clay	\$746.99
	359	12"	" }	
Massachusetts ave., Wilbraham road, southerly.....	300	15"	"	953.68
	300	12"	" }	
	227	10"	" }	
Massasoit place, Massasoit st., easterly .....	381	12"	"	....
Massasoit street, Carew street, northerly .....	709	12"	Cem.	\$579.69
Lexington ave., southerly...	300	12"	Clay	258.56
	250	10"	" }	
Montmorenci st., southerly..	233	10"	"	168.93
Montmorenci st., northerly..	152	10"	"	92.94
				1,100.12
Mattoon street, Chestnut to Salem st.....	356	1' 4"x2'-0"	Brick	688.50
	87	15"	Cem. }	
Maynard st., State st. to Shattuck ave.....	431	15"	Clay	607.82
	400	12"	" }	
McKnight st., Catharine to Sherman st.....	255	15"	Cem.	421.42
	30	15"	Clay	56.78
Catharine to Bowles st.....	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles street to Girard ave.	119	12"	Cem.	81.85
	263	10"	Clay	233.51
Mechanic street, Water street, westerly.....	302	12"	Cem.	205.25
	20	8"	Clay	26.48
Medford street, Birnie avenue, easterly .....	390	12"	"	245.55
	183	10"	" }	367.29
Melrose st., Marshall place and Cottage ave.....	429	18"	"	....
	263	15"	"	
	74	12"	"	
	772	10"	" }	1,345.66
	169	8"	" }	
Merrick avenue, King street, southerly .....	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut st.....	774	15"	Clay	....
Mill river intercepting sewer, Mill river to Locust st...	370	5'-3"	Brick	6,066.64
	691	4'-0"	" }	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Locust st. to Hickory st....	587	4' 0", cir.	Brick	\$42,706.00
	181	3' 6" x 5' 3"	"	
	1,748	5' 9", cir.	"	
	779	4' 3", cir.	"	
	1,611	3' 8", cir.	"	
in Mill and Hickory sts ...	833	2' 2" x 3' 3"	"	9,355.23
Hickory st. to Gunn square brook by northerly shore of Watershops pond.....	4,495	2' 2" x 3' 3"	"	45,545.71
				\$103,673.58
Mill st., Main st., easterly....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2' 6" x 3' 9"	Brick	4,764.79
Monmouth st., Dorchester st., northerly and easterly....	199	12"	Clay	218.15
	171	10"	"	121.75
Yale st., westerly.....	64	12"	"	45.95
	278	10"	"	281.47
Berkeley st., northwesterly..	350	12"	"	235.62
Monroe st., Hancock to East- ern ave .....	611	18"	Cem.	902.94
	789	15"	"	1,963.39
Eastern ave. to Colton st..	316	12"	"	
Monson avenue, Greene street, northerly .....	200	8"	Clay	....
Montmorenci st., Chestnut to Massasoit st .....	676	12"	"	790.22
Montrose st., State to Burr st..	338	15"	"	75.74
	217	12"	"	
	329	10"	"	
Morgan st., Garden brook to Main st .....	252	12"	Cem.	199.06
Garden brook to North st..	25	18"	"	48.07
	634	18"	Clay	1,460.31
				1,707.46
Morris st., Main st., easterly..	915	2' 0" x 3' 0"	Brick	2,942.83
	496	12"	Cem.	359.07
Mountainview st., Forest Park ave., easterly.....	297	12"	Clay	3,301.30
	297	10"	"	28.19
Mulberry st., Maple st., easterly and northerly.....	687	15"	Cem.	1,246.18
	629	12"	"	
	246	10"	Clay	
west from Ridgewood ter- race .....	144	15"	"	....
Murray Hill ave., Liberty st., northerly.....	....	....	"	1,479.77
Myrtle st., Card Factory Pond brook, northerly.....	107	10"	"	96.34
	237	8"	"	69.75

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Ayrtest, I.O., Mainto Worcester	377	24"	Clay	\$1,008.44
Worcester st., southerly....	378	10"	"	355.34
Berkshire st., southerly.....	180	10"	"	189.63
Hampshire st., southerly...	126	10"	"	100.99
Jelson avenue, Greene street, northerly.....	90	12"	Cem.	27.96
Lebanon st., northerly.....	188	10"	"	126.54
Jelson street, Nursery street, easterly.....	308	24"	Clay	154.50
Jew st., E. Court st., northerly	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Dwight st., westerly.....	164	10"	"	203.79
Jewman st., Knox st., westerly	175	12"	Cem.	430.99
Jorfolk st., Wilbraham road, southerly .....	300	15"	Clay	11.49
	300	12"	"	566.08
North st., Carew st., northerly.	190	8"	Cem.	84.88
Church to Grosvenor st....	68	18"	"	157.13
Morgan to Ringgold st.....	198	18"	"	356.84
Osgood to Hebron st.....	130	18"	Clay	426.85
	165	10"	"	411.55
Bancroft st. southerly.....	302	18"	"	114.54
Bancroft st., northerly.....	153	12"	Cem.	177.12
Jefferson ave., northerly....	233	8"	Clay	48.13
Calhoun st., northerly. ....	256	8"	"	302.86
Waverly to Grove st.....	362	12"	"	....
Harriet st., southerly.....	86	8"	"	2,079.90
Northampton ave., Wilbraham road, southerly.....	1,101	12"	"	830.79
North Church ave., Cook's ave., easterly .	209	10"	Cem.	....
Cook's avenue, westerly (for cost see Cook's ave.)....	133	10"	"	....
No. Main st, Morgan st, southerly	232	8"	Clay	171.18
Morgan st., northerly.....	173	8"	"	90.69
Arch to Osgood st.....	730	15"	Cem.	713.66
Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st...	359	24"	Clay	2,568.01
	420	20"	"	226.45
	285	15"	"	1,874.35
Grove st., northerly.....	170	12"	"	470.75
Douglas to Harriet st.....	551	1'-8"x2'-6"	Brick	1,840.24
Harriet to Waverly st.....	250	24"	Clay	449.66
Douglas to Eagle st.....	326	2'-4"x3'-6"	Brick	860.00
	272	1'-10"x2'-9"	"	....
Eagle st., northerly.....	142	24"	Clay	....
Wason ave., southerly.....	215	2'-0"x3'-0"	Brick	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wason ave., northerly.....	348	12"	Clay	\$281.41
				<u>\$10,520.67</u>
Norwood st., Main to Hanover st.	1,051	12"	Cem.	1,069.55
Nursery st., Liberty to Franklin st.	694	2'-8", cir.	Brick	2,284.52
Franklin st., northerly.....	587	2'-8", cir.	"	....
				<u>2,284.52</u>
Oak st., Union to State.....	717	18"	Cem.	921.07
Union to Tyler st.....	220	18"	Clay	752.00
	268	15"	"	
Walnut st. to Tyler st.....	158	18"	Cem.	280.65
				<u>1,963.72</u>
Oak st., I. O., north from Main	179	15"	"	
	171	12"	"	637.00
Main st., southerly.....	590	2'-2" x 3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
Hampshire st., southerly...	285	18"	"	
	300	15"	"	1,562.43
	400	12"	"	
				<u>6,199.06</u>
Oak Grove ave, State st, northerly	349	18"	"	
	327	15"	"	
	158	12"	"	....
	256	12"	"	....
Oakland st., Dickinson st. to				
Belmont ave.. .....	895	24"	"	2,218.71
Dickinson to Orange street.	254	24"	Clay	
	350	18"	"	1,619.20
	170	12"	"	
	218	8"	"	110.79
Allen to Orange street. ....	625	18"	"	
	304	15"	"	1,428.06
	193	12"	"	
	404	10"	"	
				<u>5,376.76</u>
Olivest, Eastern ave. to Logan st.	540	10"	"	400.76
Orange st., Oakland st., easterly	588	8"	"	
White st., westerly.....	381	12"	"	
	649	10"	"	961.26
White st., easterly.....	699	10"	"	
Orchard st., Plainfield street,				
westerly.....	325	20"	"	
	301	15"	"	
	297	12"	"	
	140	10"	"	1,015.67
Orleans court, Orleans street,				
westerly.....	205	8"	"	....
Orleans st., Union st., northerly..	39	12"	Cem.	36.23
	310	12"	Clay	
	330	10"	"	456.19
Tyler st., northerly.....	188	10"	Cem.	187.74

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
on ave., northerly..	231	12"	Cem.	\$327.73
.., Belmont to Sum-				\$1,007.89
erly .....	275	10"	Clay	252.85
.., Garden brook to	257	12"	Cem. }	1,544.57
st.....	588	18"	" }	
brook to North st...	92	18"	Clay	174.87
.., Riverview terrace,				1,719.44
erly .....	68	12"	"	....
ect, Grand avenue,				
erly.....	456	10"	"	23.58
venue, Locust street,				
erly .....	351	18"	" }	1,190.78
	337	15"	" }	
	14	12"	Cem.	....
				1,190.78
lain to Willow st...	395	24"	Clay	1,609.31
to Maple st.....	200	24"	" }	1,431.05
	557	18"	" }	
				3,040.36
I. O., Chicopee river				
in st.....	32	24"	" }	261.81
	221	12"	" }	
.., southerly .....	1,098	24"	"	2,460.81
nd to B. & A. R. R.	1,227	12"	"	1,266.36
				3,988.48
st., Sumner avenue,				
erly .....	215	12"	" }	70.08
	204	10"	" }	
venue, White street,				
erly.....	156	12"	" }	258.61
	291	10"	" }	
t, I. O., Essex street,				
erly .....	724	10"	"	607.80
.., Garden brook to				
st.....	214	10"	"	173.73
brook, easterly.....	352	18"	" }	1,572.67
	349	15"	" }	
	537	12"	" }	
				1,746.40
ane, Willow street,				
erly .....	216	10"	"	234.47
hestnut to Spring st.	514	24"	" }	1,792.62
	447	20"	" }	
st., easterly.....	190	1'-6" cir.	Brick	96.16
				1,888.78
Catharine to Bowles	250	12"	Clay	15.05

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Pendleton ave., Walnut st. to Hancock st.....	287	18"	Cem. }	\$1,668.94
	524	15"	" }	
	429	12"	" }	
Hancock st. to Eastern ave.	600	18"	" }	1,895.98
	793	15"	" }	
				\$3,059.92
Phoenix avenue, Liberty street, easterly.....	236	18"	Clay }	840.33
	250	15"	" }	
	89	10"	" }	
Pine st., Mill to Cedar st.....	740	2'- 6" x 3'- 9"	Brick }	13,659.54
	1,529	3'- 6" x 5'- 3"	" }	
	500	3'- 10" x 5'- 9"	" }	
Cedar to Walnut st.....	62	18"	Cem. }	1,665.54
	884	15"	" }	
	631	12"	" }	
Pine st., I. O., Main st., easterly	1,896	24"	Clay	15,325.08
Pine st. court, Pine st., easterly.	348	10"	Cem.	266.80
Pineywoods avenue, Washing- ton ave., northeasterly....	334	15"	Clay }	....
	263	12"	" }	
Magnolia terrace, westerly..	350	10"	" }	....
Magnolia terrace to Jackson st.	343	20"	" }	
	404	12"	" }	....
Jackson st. to Forest Park ave.....	341	12"	" }	....
Plainfield st., Sargeant st. to Fulton st.....	414	18"	" }	2,525.13
	537	15"	" }	
	456	12"	" }	
	244	10"	" }	
	122	12"	" }	
Washburn st., southerly....	122	12"	" }	129.78
Washburn to Roseland st...	331	2'- 8" x 4'- 0"	Brick }	1,555.00
	303	2'- 6" x 3'- 9"	" }	2,367.93
	287	2'- 4" x 3'- 6"	" }	4,518.58
	294	2'- 2" x 3'- 3"	" }	
Rowland ave. to Talcott st..	288	24"	Clay }	1,208.95
	299	20"	" }	
Talcott ave., northerly.....	216	10"	" }	158.46
Wason ave. to Demond ave.	304	24"	" }	1,253.59
	249	20"	" }	
	53	18"	" }	
Pleasant st., Bay st., southerly.	296	12"	Cem.	13,717.43
Plymouth st., Fulton st., easterly	375	10"	Clay	249.74
Pomona st., Sumner avenue, northerly .....	580	12"	" }	459.94
Port and st., Birnie ave., easterly	251	12"	" }	351.35
	224	10"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Portsmouth street.. .. .	212	12"	Clay	\$253.65
Potter place, State st., northerly	396	15"	"	....
	301	12"	"	
	274	10"	"	
	329	12"	Cem.	
Prince st., King to Lebanon st.	103	18"	"	333.15
Princeton st., Bay to Amherst st.	689	18"	Clay	\$289.08
	151	15"	"	724.15
	665	12"	Cem.	177.72
Yale to Vassar st. .... .	298	12"	"	....
St. James ave. to Cornell st.				195.52
				1,386.47
Private ways:				
Armory Hill sewer from Armory st., through private grounds east of Armory st. to Worthington st. ....	150	2'-5" x 3'-7 $\frac{1}{2}$ "	Brick	5,318.04
	900	2'-8" x 4'-0"	"	
	249	2'-1" x 3'-1 $\frac{1}{2}$ "	"	
Card-factory Pond, Woodworth ave., westerly between High and State sts in front and around High school. .... .	751	12"	Cem.	408.75
High school to State st. ....	492	24"	Clay	848.26
Cemetery brook, Morris st., easterly, north of Central street. .... .	88	24"	"	192.35
				1,449.36
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st. .... .	174	24"	"	569.59
	2,936	5'-6", cir.	Brick	47,577.34
	766	5'-0", cir.	"	
	1,303	4'-6", cir.	"	
	236	3'-0" x 4'-6"	"	
Worthington st., northeasterly to Lyman st., thence via Railroad land to Armory st. .... .	3,274	4'-7 $\frac{1}{2}$ ", cir.	"	29,761.32
	952	4'-1", cir.	"	
Jefferson ave., passage way in rear of lots on south side.	135	2'-0" x 3'-0"	"	....
	518	12"	Cem.	364.84
Passage way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	402.70
Sewer in ave., Hampden st., southerly, near Water st.	111	12"	Cem.	147.14
Sewer, Main st. to Dale st., between Hubbard avenue and William st. .... .	655	12"	"	441.92

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Springfield st. and Glenwood, via Atwater Glen.....	677 598 389 1,292 40 16 1,294	3'-6", cir. 3'-3", cir. 4'-3", cir. 3'-0", cir. 3'-0", cir. 2'-10" x 4'-3" 24"	Brick " " " " " Clay	   \$14,614.89   3,889.98 \$18,504.87
Prospect st., Chestnut street, easterly.....	218 199 196 950	18" 15" 12" 2'-0" x 3'-0'	" " " Brick	   3,108.08
Pynchon st.....	209	15"	Clay	402.82
Quebec st., I. O., Lyons st., easterly.....	634	12"	Cem.	634.22
Queen st., Walnut to Hancock st.	860	12"	"	619.96
Quincy st., Oak to Stebbins st.	522	12"	"	549.58
Hancock to Stebbins st....	637	18"	"	1,708.99
Hancock to Eastern ave....	765	15"	"	
Colton to Eastern ave.....	208	10"	Clay	156.87 3,080.40 490.75
Railroad st., Waterst., easterly	351	12"	"	
Randolph street, Maplewood terrace, easterly.....	250 251	12" 10"	" "	 ....
Raymond ave., Carew street, northerly.....	277	10"	"	217.32
Reed st., State st., southerly..	219 309	12" 10"	" "	 110.45
Revere st., White st., southerly.	750 250 209	20" 10" 8"	" " "	  23.32
Richelieu court, Adams st., southerly.....	160 260	12" 10"	" "	 474.21
Richelieu place, Richelieu court easterly.....	100	8"	"	....
Ridgewood place, Mulberry st., northerly.....	400	12"	"	29.46
Ridgewood terrace, Mulberry st westerly.....	226	10"	"	....
Rimmon ave., Green lane to Weaver Ramble.....	859	18"	"	....
Ringgold st., North to Chest- nut st.....	117 632	18" 12"	Cem. "	 681.72
Ripley ave., St. James avenue, southerly.....	230	10"	"	163.48
Riverview st., Riverview ter- race, northerly.....	63	10"	Clay	....
Forest Park ave., southerly.	299	10"	"	217.39

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Riverview terrace, Fort Pleasant ave., easterly .....	298	15"	Clay	....
	322	12"	"	
	105	10"	"	
Roseland st., Plainfield street, westerly.....	350	18"	"	\$1,352.31
	350	15"	"	
	173	12"	"	
Rowland ave., Conn. river to North Main st., including 630' in Douglas st. ....	579	5'-3", cir.	Brick	32,489.36
	51	1'-8" x 2'-6"	"	
	1,247	6'-6", cir.	"	
	1,330	6'-0", cir.	"	
Rutland ave., Wilbraham road to State st. ....	199	8"	Clay	147.15
Rutledge avenue, Main street, easterly .....	574	24"	"	49.43
Sachem st., Dickinson st., northerly.....	330	10"	"	345.31
Salem st., Pearl st., south and east .....	283	18"	Cem.	804.72
	99	15"	"	
	290	12"	"	
Sanford st .....	536	3'-2" x 4'-9"	Brick	4,014.47
Sargeant st., Fulton to Main (cost shown under Clinton street).....	920	4'-6" x 6'-9"	"	....
School st., Union to Mulberry street.....	549	15"	Clay	\$620.95
Union st., northerly.....	262	10"	"	204.00
				824.95
Seventh st., Fulton to Main st. Sewer in avenue (see private ways).	830	12"	Cem.	661.03
Sewer (see private ways).				
Sheldon st., Becket to North Main st. ....	42	10"	Clay	43.87
Sharon st., Garden brook to Main st. ....	360	15"	Cem.	762.77
Garden brook, easterly.....	601	18"	"	1,211.18
	463	12"	"	
				1,973.95
Shattuck ave., Maynard ave. to Willard ave. ....	200	10"	Clay	....
	143	8"	"	
Willard ave., easterly.....	50	8"	"	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Sherman st., Bay to Clarendon st.	175	12"	Cem. {	\$571.12
Bay to McKnight st. ....	448	12"	" {	
State to McKnight st. ....	301	18"	Clay {	
	301	15"	" {	1,814.14
	544	12"	" }	
				————— \$1,885.26
Silver st., Armory st., easterly.	302	15"	" {	
	297	12"	" {	470.93
Smith st., Knox to Dorne st..	200	12"	Cem.	27.26
Sorrento ave., Sumner avenue, northerly .....	82	6"	Clay	7.49
Spring st., south from Lyman st.	281	15"	Cem. }	
	130	12"	" }	
Worthington to State st. ....	470	18"	" }	2,479.25
	640	15"	" }	
	644	12"	" }	
Worthington st., northerly..	132	12"	Clay	87.38
Worthington to Summer st.	183	5'-0"	Brick {	1,498.24
	49	4'-3" x 6'-0"	" {	
				————— 4,064.77
Springfield st., Atwater ter- race, northerly .....	892	20"	Clay {	1,988.87
	209	18"	" {	
	236	8"	"	.....
				————— 1,988.87
Springfield st., and Glenwood (see private ways.)				
Spruce street, Central street, northerly .....	600	12"	Cem.	558.03
Spruceland avenue, Magnolia terrace, westerly .....	67	8"	Clay	....
Beechwood ave., easterly...	242	8"	"	136.48
Beechwood ave., westerly..	648	8"	"	....
continued to Long Hill st. ...	93	8"	"	153.52
Stafford street, Armory street, westerly .....	402	10"	"	290.00
State st., Water st., westerly..	152	12"	Cem.	45.27
	91	12"	"	71.19
Water st. to Main st. ....	907	18"	"	1,167.64
Main to Dwight st. ....	636	18"	"	1,433.50
Dwight st. to High school..	29	2'-8" x 4'-0"	Brick {	
	265	2'-2" x 3'-3"	" {	4,897.66
	417	2'-0" x 3'-0"	" }	
At High school, connecting old with new .....	54	24"	Clay	161.88

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
High school to Oak street. near top of hill.....	2,682 505	2'-0" cir. 18"	Brick Cem.	\$4,099.53 708.18
Repairing front of Benton park.....	190	12"	Clay	212.78
Oak to Buckingham st....	2,110	18"	Cem.	2,590.03
Hancock to Sherman st....	1,147	3'-4" x 5'-0"	Brick	13,555.85
Sherman to Chapin st....	492	3'-0" x 4'-6"	"	
Chapin st. to Andrew st....	726	3'-0" x 4'-6"	"	
Andrew st. to Oak Grove ave.....	937	2'-10" x 4'-3"	"	
east from Oak Grove ave. to Courtland st.....	548 283 352	2'-4" x 3'-6" 2'-2" x 3'-3" 2'-0" x 3'-0"	" " "	5,042.79
Courtland st. to almshouse..	355 112 1,547	24" 18" 12"	Clay " "	
Stearns square (west roadway), Bridge street, northerly...	172	12"	"	— \$46,677.85 205.83
Stearns square (east roadway), Bridge street, northerly...	167	8"	"	67.00
Stebbins street, Union street, northerly .....	506 67	12" 10"	Cem. Clay	467.11 37.29
Sterns terrace, Central street, northerly .. . . . .	393	12"	"	504.40 605.10
St. James avenue, Bay street to Ripley ave .....	681	12"	Cem.	565.86
Florida st. to Ripley ave...	469	12"	"	500.89
Florida st., northerly.....	417 300	18" 12"	" "	1,073.90
Clarendon st. to Westminster street .....	248	15"	"	404.60
Clarendon st., northerly....	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'-0" x 3'-0"	Brick	2,738.53
Harvard to Princeton st....	528	24"	Clay	1,587.44
Princeton st., northerly...	308 249 57	18" 15" 12"	" " "	965.55
Stockbridge street, Main street, easterly .....	777	18"	Cem.	7,901.59 1,084.57
Sullivan street, Armory street, easterly .....	395	12"	Clay	....
Summer st., Spring to Armory street.....	44 1,344 1,093 750	4'-3" x 6'-0" 4'-2" x 6'-3" 2'-10" x 4'-3" 3'-8" x 5'-6"	Brick " " "	24,048.88

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Sumner ave., Fort Pleasant ave. to Long Hill st.....	448 358	12" 10"	Clay } "	\$815.24
Fort Pleasant ave. to Ran- dolph st. ....	673	2'- 0"x3'-0"	Brick }	
Randolph st. to Jackson st..	360	1'-10"x2'-9"	" }	7,968.46
Jackson st. to Forest Park av.	360	1'- 8"x2'-6"	" }	
Forest Park ave. to Green- leaf st. ....	367	1'- 6"x2'-3"	" }	
Greenleaf st. to Belmont ave.	355	20"	Clay }	2,915.88
	851	18"	" }	
	736	15"	" }	
	272	12"	" }	
	426	10"	" }	
Belmont ave., easterly ....	100	8"	" }	37.49
Dickinson st. to White st...	2,219	2'-8"x 4'-0"	Brick }	11,531.37
White st., easterly.....	565	2'-2"x 3'-8"	" }	2,391.46
Symonds ave., Worthington st. to Bridge st. (includes cost of Bond place).....	300	15"	Cem.	\$35,659.90 696.89
Talcott ave., Fisk ave. to Plainfield st.....	362 316	15" 12"	Clay }	549.57
Taylor st., Main to Chestnut st.	650	15"	Cem. }	1,347.50
	341	12"	" }	255.73
	248	12"	Clay }	1,608.23
Temple st., Maple st., easterly.	194	15"	" }	236.73
outlet into High school sewer	169	15"	" }	171.71
Tenth street, Garden brook, easterly .....	300	18"	" }	408.44
	302	15"	" }	
	421	12"	" }	1,256.39
	4	8"	" }	
Terrence st., Union to State st.	374	12"	" }	565.26
	313	10"	" }	34.02
	48	10"	Cem.	599.28
Thomas st., Birnie ave., easterly	451	10"	Clay	338.41
Thompson st., Worthington st., southerly.....	603	12"	Cem.	638.27
St. James ave. to Bay st....	703	15"	" }	749.22
State to Bay st. ....	852	12"	" }	653.12
Tracy avenue, Franklin street, southerly .....	14	10"	Clay	2,040.61
	262	10"	" }	15.48
Tyler st., Oak to Hancock st	717	15"	Cem. }	1,165.68
	663	12"	" }	778.27
Hancock to Eastern ave..	601	18"	" }	644.31
	795	15"	" }	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eastern ave., easterly.....	251	10"	Cem.	\$139.49
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	2,024	3'-4" x 5'-0"	Brick	27,384.14
	302	2'-6" x 3'-6"	"	
	2,688	2'-0" x 3'-0"	"	
	848	1'-8" x 2'-6"	"	
Oak to Orleans st.....	404	15"	Cem.	467.96
Hancock to Stebbins st.....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	"	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave....	600	18"	Cem.	1,413.45
	800	15"	"	
Eastern ave., easterly.....	248	10"	Clay	152.56
				34,458.84
Vassar street, Harvard street, northerly .....	550	12"	Cem.	153.37
Ventura street, Sumner avenue, northerly .....	351	10"	Clay	289.51
Vernon st., Water st., easterly.	639	15"	Cem.	795.08
Main st., westerly .....	216	12"	"	310.68
				1,105.76
Vine st., Main to Fulton st...	697	12"	"	602.45
Vinton st., Liberty to Franklin st	357	12"	Clay	
	262	10"	"	252.13
				609.76
Walden st., Dickinson street, easterly .....	106	8"	"	94.93
Walnut st., south from State st.	69	1'-6" x 1'-8"	Brick	
north from Charter ave ...	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	482.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'-0" x 3'-0"	Brick	4,956.57
Pine to Oak st.....	272	18"	Cem.	410.04
Hancock to Cedar st.....	784	15"	"	1,269.67
Hancock st., southerly.....	180	12"	"	
North from Manhattan st....	249	10"	Clay	212.35
Florence st., northerly ....	53	8"	Cem.	27.12
Hickory to Florence st.....	1,026	12"	Clay	992.67
				9,667.59
Walter st., Birnie ave., easterly.	285	12"	Cem.	14.86
Waltham avenue, Wilbraham road, southerly.....	911	12"	Clay	928.30
Wareham st., Grand avenue, southerly.....	419	10"	"	21.24

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Sumner ave., Fort Pleasant ave. to Long Hill st.....	448 358	12" 10"	Clay } "	\$815.24
Fort Pleasant ave. to Ran- dolph st. ....	673	2'- 0"x3'-0"	Brick }	
Randolph st. to Jackson st..	360	1'-10"x2'-9"	" }	7,968.46
Jackson st. to Forest Park av.	360	1'- 8"x2'-6"	" }	
Forest Park ave. to Green- leaf st. ....	367	1'- 6"x2'-3"	" }	
Greenleaf st. to Belmont ave.	355	20"	Clay }	2,915.86
	851	18"	" }	
	736	15"	" }	
	272	12"	" }	
	426	10"	" }	
Belmont ave., easterly ....	100	8"	" }	37.49
Dickinson st. to White st. .	2,219	2'-8"x4'-0"	Brick }	11,531.37
White st., easterly.....	565	2'-2"x3'-3"	" }	2,391.46
Symonds ave., Worthington st. to Bridge st. (includes cost of Bond place).....	300	15"	Cem.	<u>\$25,659.90</u> 696.89
Talcott ave., Fisk ave. to Plainfield st.....	362 316	15" 12"	Clay }	549.57
Taylor st., Main to Chestnut st.	650	15"	Cem. }	
	341	12"	" }	1,347.50
	248	12"	Clay }	255.73
				<u>1,603.23</u>
Temple st., Maple st., easterly.	194	15"	" }	236.73
outlet into High school sewer	169	15"	" }	171.71
Tenth street, Garden brook, easterly .....	300	18"	" }	406.44
	302	15"	" }	
	421	12"	" }	1,356.39
	4	8"	" }	
Terrence st., Union to State st.	374	12"	" }	
	313	10"	" }	565.26
	48	10"	Cem. }	34.02
				<u>599.28</u>
Thomas st., Birnie ave., easterly	451	10"	Clay }	338.41
Thompson st., Worthington st., southerly.....	603	12"	Cem.	638.27
St. James ave. to Bay st....	703	15"	" }	749.22
State to Bay st.....	852	12"	" }	653.12
Tracy avenue, Franklin street, southerly .....	14	10"	Clay }	2,040.61
	262	10"	" }	15.48
Tyler st., Oak to Hancock st.	717	15"	Cem. }	.....
	663	12"	" }	1,165.66
Hancock to Eastern ave..	601	18"	" }	778.27
	795	15"	" }	644.31

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eastern ave., easterly.....	251	10"	Cem.	\$139.49
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	2,024	3'-4" x 5'-0"	Brick	27,384.14
	302	2'-6" x 3'-6"	"	
	2,688	2'-0" x 3'-0"	"	
	848	1'-8" x 2'-6"	"	
Oak to Orleans st.....	404	15"	Cem.	467.96
Hancock to Stebbins st.....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	"	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave....	600	18"	Cem.	1,413.45
	800	15"	"	
Eastern ave., easterly.....	248	10"	Clay	152.56
				34,458.84
Vassar street, Harvard street, northerly .....	550	12"	Cem.	153.37
Ventura street, Sumner avenue, northerly .....	351	10"	Clay	289.51
Vernon st., Water st., easterly.	639	15"	Cem.	795.08
Main st., westerly .....	216	12"	"	310.68
				1,105.76
Vine st., Main to Fulton st...	697	12"	"	602.45
Vinton st., Liberty to Franklin st	357	12"	Clay	357.63
	262	10"	"	252.13
				609.76
Walden st., Dickinson street, easterly .....	106	8"	"	94.93
Walnut st., south from State st.	69	1'-6" x 1'-8"	Brick	85.23
north from Charter ave ....	292	10"	Clay	418.30
Union to Charter ave .....	279	12"	Cem.	482.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'-0" x 3'-0"	Brick	4,956.57
Pine to Oak st.....	272	18"	Cem.	410.04
Hancock to Cedar st.....	784	15"	"	1,269.67
Hancock st., southerly.....	180	12"	"	
North from Manhattan st....	249	10"	Clay	212.35
Florence st., northerly.....	53	8"	Cem.	27.12
Hickory to Florence st....	1,026	12"	Clay	992.67
				9,667.59
Walter st., Birnie ave., easterly.	285	12"	Cem.	14.86
Waltham avenue, Wilbraham road, southerly.....	911	12"	Clay	928.30
Wareham st., Grand avenue, southerly.....	419	10"	"	21.24

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Warner place, Fort Pleasant ave. to Long Hill st. ....	508 198 89	12" 10" 10"	Clay } " } " }	.... \$51.88 \$51.88
Warriner ave., Locust street, easterly .....	448	12"	"	399.54
Washburn st., Conn. river to B. & M. R. R. ....	1,758	7'-0", cir.	Brick	21,678.46
Washington ave, Long Hill st. to Magnolia ter. ....	304 823	2'- 4"x3'-6" 2'- 2"x3'-3"	" } " }	5,032.68
Wason ave., Conn. river to Plainfield st. ....	451	3'-10"x5'-9"	"	16,610.73
Plainfield st. to Fisk ave. .	1,051	3'- 4"x5'-0"	"	
Fisk ave. to Birnie ave. ....	634	3'- 2"x4'-9"	"	
Birnie ave. to North Main st.	247	2'- 0"x3'-0"	"	
Water st., Gardner to Loring st.	474	1'-10"x2'-9"	"	1,182.58
Loring st., northerly. ....	345	12"	Cem.	237.38
Union to Margaret st. ....	721	2'- 0"x3'-0"	Brick }	2,284.34
Union st., northerly. ....	868	18"	Cem. }	
Elm to State st. ....	275	18"	"	508.75
Elm to Pynchon st. ....	43	2'- 0"x3'-0"	Brick	198.00
Pynchon st., northerly. . . .	498	2'- 6"x3'-6"	"	2,949.29
	257	18"	Cem.	404.44
	329	15"	"	460.60
	61	12"	"	85.40
Worthington st., southerly. .	209	10"	Clay	333.54
Worthington to Hampden st.	327	15"	Cem.	457.80
Hampden to Railroad street	321	12"	Clay	638.58
Waverly street, North Main to Chestnut st. ....	473 487	20" 10"	" } " }	9,740.70 1,197.09
Weaver Ramble, Rimmon ave., westerly and northerly	480	12"	"	....
Webster st., Liberty to Frank- lin st. ....	601	12"	"	395.54
Welcome place, Bay street, northerly. ....	238	8"	"	....
Wellesley st., Cornell street, easterly .....	373	12"	Cem.	94.76
Wellington avenue, Wilbraham road, southerly. ....	287 244 291	15" 12" 10"	Clay } " } " }	23.53
Wendell ave., Main st., easterly.	458	15"	"	....
Westernview st., Forest Park ave., easterly .....	468 138	12" 10"	" } " }	511.16

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Westford avenue, Wilbraham road, southerly.....	300	15"	Clay	\$676.23
	300	12"	"	
	350	10"	"	
* Westford circle to King st...	541	12"	"	454.36
				\$1,130.59
Westminster st., Bay to State st.	300	15"	"	705.11
	300	12"	"	
	201	10"	"	
St. James ave., southerly...	773	12"	Cem.	700.02
				1,405.13
White st., Allen to Orange st..	747	24"	Clay	1,717.86
	674	20"	"	1,490.97
	274	18"	"	
Orange st. to Dawson ave..	388	15"	"	389.27
	292	15"	"	275.73
Gordon st. to Dawson ave..	192	10"	"	187.69
Gordon st. to south line of school lot.....	690	12"	"	671.32
				4,732.84
Whitney avenue, Water street, westerly.....	450	12"	Cem.	257.32
Whittier ave., Sumner ave. to Longfellow terrace.....	301	18"	Clay	1,261.63
	299	15"	"	
	301	12"	"	
	221	10"	"	
Wilbraham avenue, Wilbraham road, southerly.....	1,125	12"	"	1,020.78
Alden st. to Beverly st.....	999	10"	"	1,121.36
	1,180	8"	"	
				2,142.14
Wilbraham road, State street, easterly .....	248	12"	Cem.	157.79
State st. to Northampton ave.	1,451	2'-0"x3'-0"	Brick	6,198.76
Northampton ave. to Bristol street.....	472	2'-6"x3'-9"	"	8,970.16
	476	2'-4"x3'-6"	"	
	478	2'-2"x3'-3"	"	
	473	2'-0"x3'-0"	"	
	254	1'-10"x2'-9"	"	
	256	1'-8"x2'-6"	"	
Bristol st., easterly.....	263	20"	Clay	859.35
	405	12"	"	
				16,186.06
Wilcox st., Water st., easterly.	548	15"	Cem.	891.89
	327	12"	"	
Water st., westerly.....	463	12"	"	205.76
				1,097.65

\*Sanitary sewer.



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Willard avenue, State street, northerly.....	282	18"	Clay	\$785.26
	300	15"	"	
	241	12"	"	
Shattuck ave., southerly....	215	8"	"	....
				\$785.26
William st., Water to Main st.	908	12"	Cem.	.952.89
Main to Dale st.....	351	12"	Clay	906.35
	288	10"	"	
	76	15"	Cem.	
Water st., westerly.....	425	12"	"	459.79
				2,319.03
Willow st., Cross to State st...	413	12"	Clay	791.42
Cross to Park st.....	265	12"	"	378.17
Union to Park st.....	216	18"	Cem.	325.32
Union st., to Hubbard ave..	219	10"	Clay	204.59
Wilmont st., Dickinson st. to Revere st.....	349	18"	"	1,699.30
	450	15"	"	1,557.40
	386	12"	"	
	424	12"	"	
Winchester st.....	80	15"	Cem.	357.96
Windsor st., Knox st., westerly.	485	10"	"	....
Winthrop st., Main st., easterly.	52	18"	"	220.81
	141	15"	"	
	520	2'-6"x3'-6"	Stone	
Wolcott street, Armory street, westerly .....	220	10"	Clay	....
Woodside ter., Belmont ave., northerly.....	451	10"	"	321.97
Forest Park ave., northerly	307	10"	"	....
				321.97
Worcester ave., Plainfield to Birnie ave.....	1,486	15"	Cem.	53.14
Worcester st., I. O., Myrtle to Chestnut st.....	4	24"	Clay	945.80
	290	20"	"	
	382	2'-0"x3'-0"	Brick	
Chestnut to Holly street...	670	1'-10"x2'-9"	"	1,288.00
Oak st., easterly.....	275	12"	Clay	2,398.09
	212	10"	"	519.07
	546	20"	"	
	224	18"	"	
Pine st., easterly.....				768.42
				344.66
				6,280.04
Worthington st., submerged outlet .....	194	24"	Wood	1,888.04
	22	24"	C. Iron	176.25
Conn. river to Main st....	1,038	5'-7"x7'-0"	Brick	33,410.12
Main to Dwight st.....	821	5'-4"x7'-0"	"	
Dwight to Garden brook ..	566	4'-0"x6'-0"	"	

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Garden brook to Spring st..	738	4'-8"	Brick	\$4,361.35
Spring st., branch north....	35	5'-0"	"	
Spring st., branch south....	47	2'-0" x 3'-0"	"	
Spring street, easterly .....	40	18"	Cem.	
	242	15"	"	614.35
	251	12"	"	
Autumn st., westerly .....	113	12"	"	
near Sacketts ave. ....	145	10"	"	111.47
West brook, easterly.....	329	15"	Clay	1,110.54
	217	12"	"	
West brook to Autumn st..	281	15"	"	
Sacketts ave., westerly.....	98	12"	"	207.28
Sacketts ave. to Kibbe ave..	337	12"	Cem.	335.57
Kibbe ave. to Federal st....	794	15"	Clay	826.90
Kibbe hollow, westerly to Magazine street.....	167	18"	"	381.28
near Magazine to Bowdoin st.	248	2'-8" x 4'-0"	Brick	20,646.21
	354	2'-1" x 3'-1½"	"	
Bowdoin st. to St. James ave.	359	3'-4" x 7'-2"	"	
	1,307	3'-4" x 6'-9"	"	
				—————\$64,910.50
Yale st., Dartmouth to Prince- ton st.....	350	24"	Clay	1,770.13
	359	18"	"	
	238	15"	"	
Princeton st., northerly....	712	12"	"	
				452.46
				2,222.59
York st.....	1,203	7'-0", cir.	Brick	13,912.27
Total .....	562,577			\$1,847,143.94

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Elliptical shaped.....	1,038	5'- 7"x7'- 0"	Brick and cem. mortar.
" " ".....	821	5'- 4"x7'- 0"	" " "
" " ".....	1,095	4'-10"x7'- 3"	" " "
" " ".....	1,949	4'- 8"x7'- 0"	" " "
" " ".....	1,170	4'- 6"x6'- 9"	" " "
" " ".....	1,040	4'- 4"x6'- 6"	" " "
" " ".....	2,340	4'- 2"x6'- 3"	" " "
" " ".....	1,746	3'- 8"x5'- 6"	" " "
" " ".....	830	3'- 4"x5'- 0"	" " "
" " ".....	536	3'- 2"x4'- 9"	" " "
" " ".....	819	3'- 0"x4'- 6"	" " "
" " ".....	1,093	2'-10"x4'- 3"	" " "
" " ".....	2,506	2'- 8"x4'- 0"	" " "
" " ".....	5,778	2'- 2"x3'- 3"	" " "
" " ".....	417	2'- 0"x3'- 0"	" " "
Egg shaped.....	566	4'- 0"x6'- 0"	" " "
" " ".....	1,131	3'-10"x5'- 9"	" " "
" " ".....	1,074	3'- 8"x5'- 6"	" " "
" " ".....	3,512	3'- 6"x5'- 3"	" " "
" " ".....	359	3'- 4"x7'- 2"	" " "
" " ".....	1,307	3'- 4"x6'- 9"	" " "
" " ".....	9,586	3'- 4"x5'- 0"	" " "
" " ".....	1,056	3'- 2"x4'- 9"	" " "
" " ".....	2,877	3'- 0"x4'- 6"	" " "
" " ".....	953	2'-10"x4'- 3"	" " "
" " ".....	364	2'- 9"x4'- 11"	" " "
" " ".....	2,516	2'- 8"x4'- 0"	" " "
" " ".....	4,818	2'- 6"x3'- 9"	" " "
" " ".....	800	2'- 6"x3'- 6"	" " "
" " ".....	150	2'- 5"x3'- 7 1/2"	" " "
" " ".....	8,636	2'- 4"x3'- 6"	" " "
" " ".....	8,688	2'- 2"x3'- 3"	" " "
" " ".....	603	2'- 1"x3'- 11"	" " "
" " ".....	21,973	2'- 0"x3'- 0"	" " "
" " ".....	4,921	1'-10"x2'- 9"	" " "
" " ".....	3,980	1'- 8"x2'- 6"	" " "
" " ".....	917	1'- 6"x2'- 3"	" " "
" " ".....	669	1'- 4"x2'- 0"	" " "
Circular.....	3,017	7'-0"	" " "
" " ".....	3,019	6'-6"	" " "
" " ".....	1,330	6'-0"	" " "
" " ".....	1,743	5'-9"	" " "
" " ".....	3,842	5'-6"	" " "
" " ".....	949	5'-3"	" " "
" " ".....	2,257	5'-0"	" " "
" " ".....	3,274	4'-7 1/2"	" " "
" " ".....	1,762	4'-6"	" " "
" " ".....	3,362	4'-3"	" " "
" " ".....	952	4'-1"	" " "

## RECAPITULATION BY SIZES.—CONCLUDED.

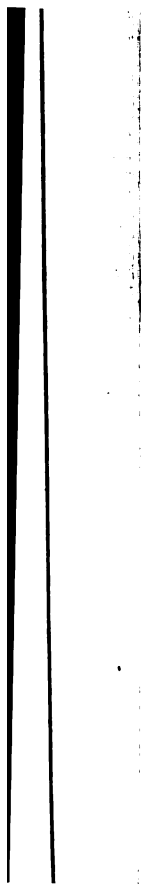
DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	2,399	4'-0"	Brick and cem. mortar.
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	3,202	2'-0"	" " "
" .....	190	1'-6"	" " "
" .....	24,915	24"	Clay pipe.
" .....	18,042	20"	" "
" .....	28,949	18"	" "
" .....	41,977	15"	" "
" .....	89,965	12"	" "
" .....	66,445	10"	" "
" .....	14,133	8"	" "
" .....	389	6"	" "
" .....	23,306	18"	Cement pipe.
" .....	39,044	15"	" "
" .....	62,712	12"	" "
" .....	4,428	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Segmental .....	93	6'-0"x4'-3"	Brick and cem. mortar.
" .....	60	5'-0"x2'-1"	Concrete.
Miscellaneous shapes .....	2,329		Stone, brick, and mortar.
Total .....	562,577		

Classified as follows:—

	Feet.	Miles.
Brick and cement mortar, . . . . .	143,917	27.26
Miscellaneous materials, . . . . .	3,553	.67
Clay pipe, . . . . .	284,795	53.93
Cement pipe, . . . . .	130,312	24.68
Total, . . . . .	562,577	106.54

181503





Annual Report  
**Superintendent of  
Streets and Sewers**

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Springfield, Massachusetts

COMPLIMENTS OF



ARTHUR A. ADAMS,

Superintendent of Streets and Sewers.

For the Year 1907

*124*

**Annual Report**  
**Superintendent of**  
**Streets and Sewers**

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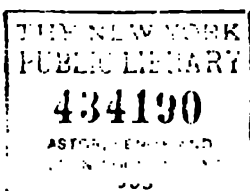
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**Springfield, Massachusetts**



**For the Year 1907**





# THIRTY-NINTH ANNUAL REPORT

OF THE

## STREET DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1907.

*Council:—*

In accordance with the requirements of Chapter 19, Section 1, of the Revised Ordinances, I have the honor of presenting to you the receipts and expenditures of the Street Department for the fiscal year ended December 30, 1907.

### FINANCES IN GENERAL.

#### REGULAR ACCOUNTS.

##### RECEIPTS.

Bridges,	.	.	.	.	\$196,160 35
Lighting,	.	.	.	.	24,682 14
Repairs,	.	.	.	.	32,448 55
					<hr/>
					\$253,291 04

##### EXPENDITURES.

Bridges,	.	.	.	.	\$195,953 51
Lighting,	.	.	.	.	23,627 06
Repairs,	.	.	.	.	32,034 37
					<hr/>
					\$251,614 94

##### UNEXPENDED BALANCES.

Bridges,	.	.	.	.	\$206 84
Lighting,	.	.	.	.	1,055 08
Repairs,	.	.	.	.	414 18
					<hr/>
					\$1,676 10

*Report on Streets.*

## SPECIAL ACCOUNTS.

## ABBE AVENUE, OVERHEAD CROSSING.

Limit of expenditure, . . . . .	\$61,667 34	
Expenditures, . . . . .	28,975 92	
	<hr/>	
Unexpended balance, . . . . .		\$32,691 42

## CHESTNUT AND SPRINGFIELD STREETS, WIDENING.

Limit of expenditure, . . . . .	\$12,446 00	
Expenditures, . . . . .	10,790 86	
	<hr/>	
Unexpended balance, . . . . .		\$1,655 14

## CITY YARD, SUMMER STREET.

Limit of expenditure, . . . . .	\$41,753 00	
Expenditures, . . . . .	36,500 01	
	<hr/>	
Unexpended balance, . . . . .		\$5,252 99

## PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.

Limit of expenditure, . . . . .	\$32,117 00	
Expenditures, . . . . .	11,689 18	
	<hr/>	
Unexpended balance, . . . . .		\$20,427 82

WORK IN GENERAL.

Streets, . . .	{	Grading and graveling, . . . . .	5,841 feet
		Macadamizing, . . . . .	20,593 feet
		Macadam resurfacing, . . . . .	11,052 feet
		Granite block paving, . . . . .	816 feet
		Syracuse brick, . . . . .	36 feet
		Wood block paving, . . . . .	509 feet
Street cleaning,	{	Gravel, . . . . .	42.11 miles
		Macadam, . . . . .	59.87 miles
		Paving, . . . . .	8.9 miles
Sidewalks, . . .	{	Brick (new), . . . . .	4,132 feet
		Brick (relaid), . . . . .	3,355 feet
		Tar concrete (new), . . . . .	4,221 feet
		Tar concrete (resurfaced), . . . . .	1,526 feet
Curbing, . . .	{	Set, . . . . .	13,525 feet
		Reset, . . . . .	6,240 feet
Crosswalks—new, . . . . .			35
Streets watered, . . . . .			85.86 miles

## FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

By regular appropriation, . . . . .	\$140,000 00	
From Springfield Street Railway Company,		
Corporation tax, . . . . .	25,081 13	
Excise tax. . . . .	12,856 06	
By order of City Council, betterments, . . . . .	177 50	
From departments and private parties, bills		
rendered, . . . . .	16,689 84	
By amounts not collected on pay rolls, . . . . .	105 82	
Transferred from Watering Streets, . . . . .	1,250 00	
		<u>\$196,160 31</u>

## EXPENDITURES.

Automobile, repairs and supplies, . . . . .	\$477 26	
Bridges, repairs and care, . . . . .	3,761 25	
City teams, including new wagons, horses		
and harness, . . . . .	3,611 60	
City yard, Logan street, . . . . .	69 28	
City yard, Lyman street, rent and operating		
to March, . . . . .	997 94	
City yard, Sum- ( Operating, etc., . . . . .	4,435 48	
mer street, ( New concrete bins and		
trestle, . . . . .	5,059 12	
Engineering, . . . . .	255 11	
Foremen's winter and holiday pay, . . . . .	861 38	
Office and general expenses, . . . . .	2,836 53	
Salary of superintendent, . . . . .	2,108 37	
Salary of second assistant superintendent, part,	1,038 24	
Steam roller house repairs and roller equip-		
ment, . . . . .	66 03	
Grading and graveling, . . . . .	4,946 61	
Macadamizing, . . . . .	39,161 38	
Miscellaneous, . . . . .	927 19	
Paving, . . . . .	14,809 46	

## Report on Streets.

7

et maintenance	{ Cleaning, . . . . .	\$33,475 31	
	{ Cleaning equipment, . . . . .	779 05	
	{ General repairs, . . . . .	19,501 56	
	{ Macadam resurfacing, . . . . .	9,777 55	
	{ Winter expenses, . . . . .	25,302 82	
ls and supplies, . . . . .		2,916 13	
rk and material charged to departments, . . . . .		6,914 12	
rk and material charged to private parties, . . . . .		12,350 27	
		<hr/>	
		\$197,042 04	
lit by materials, . . . . .		1,088 53	
		<hr/>	
		\$195,953 51	
xpended balance, . . . . .		206 84	
		<hr/>	
			\$196,160 35

### BILLS RECEIVABLE.

unpaid December 10, 1906, . . . . .	\$1,139 19	
committed, fiscal year 1907, . . . . .	17,213 31	
	<hr/>	\$18,352 50
paid, fiscal year 1907, . . . . .	\$16,689 84	
tements, . . . . .	64 51	
	<hr/>	16,754 35
		<hr/>
Bills receivable December 10, 1907, . . . . .		\$1,598 15

### WALKS AND CURBING.

#### RECEIPTS.

egular appropriation, . . . . .	\$10,000 00	
n abutters for work done previous to 1907, . . . . .	6,930 64	
n abutters for work done during 1907, . . . . .	7,483 23	
ebate from B. & M. R. R. Co., . . . . .	18 27	
isferred from Watering Streets, . . . . .	250 00	
	<hr/>	\$24,682 14

*Report on Streets.*

## EXPENDITURES.

Crosswalks, new and relaid, . . . . .	\$3,229	41	
Engineering, . . . . .	295	10	
Foremen's winter and holiday pay, . . . . .	61	18	
Office and general expenses, . . . . .	66	15	
Salary of second assistant superintendent, part, . . . . .	432	60	
Setting and resetting curbing, . . . . .	4,655	91	
Sidewalk repairs not chargeable, . . . . .	601	67	
Tools, . . . . .	26	40	
Work and material charged to abutters, . . . . .	13,922	00	
Work and material charged to departments, . . . . .	1,290	05	
Work and material not chargeable, . . . . .	840	34	
	<u>\$25,420</u>	81	
Credit by City teams, . . . . .	\$303	40	
Credit by materials, . . . . .	1,490	35	1,793 75
			<u>\$23,627 06</u>
Unexpended balance, . . . . .		1,055 08	<u>\$24,682 14</u>

## BILLS RECEIVABLE.

Bills unpaid December 10, 1906, . . . . .	\$6,103	41	
Bills committed, fiscal year 1907, . . . . .	17,069	16	\$23,172 57
			<u>\$14,413 87</u>
Bills paid, fiscal year 1907, . . . . .			
Abatements, . . . . .	832	46	15,246 33
			<u>\$7,926 24</u>
Bills receivable December 10, 1907, . . . . .			

## WATERING STREETS.

## RECEIPTS.

By appropriation, . . . . .	\$5,000	00	
By watering streets assessments, . . . . .	25,215	18	
From Springfield Street Railway Company, . . . . .			
by agreement, . . . . .	2,208	37	
By bills rendered, . . . . .	25	00	\$32,448 55
			<u>\$32,448 55</u>

# Report on Streets.

9

## EXPENDITURES.

Equipment,	{ Three new carts, . . .	\$1,062 00	
	{ One old cart, . . .	122 39	
General expenses, . . . . .		356 77	
Standpipes and car hydrants, construction, maintenance, opening and closing, . . .		1,527 24	
Standpipe bases, construction and maintenance, . . .		130 55	
Watering carts, repairs and storage, . . .		882 19	
For use of teams as per pay rolls, . . .		841 47	
For use of teams as per contracts, . . .		15,473 38	
American Car Sprinkler Company, as per contracts, . . . . .		9,042 30	
Inspector, . . . . .		835 84	
Inspector's horse and carriage, . . . . .		183 24	
Tools and materials, . . . . .		91 20	
		<hr/>	
		\$30,548 57	
Transferred to Walks and Curbing, . . . . .		250 00	
Transferred to H. & B. maintenance, . . . . .		1,250 00	
		<hr/>	
		\$32,048 57	
Credit by City teams, . . . . .		14 20	
		<hr/>	
		\$32,034 37	
Unexpended balance, . . . . .		414 18	
		<hr/>	
			\$32,448 55

## ABBE AVENUE, OVERHEAD CROSSING.

### LIMIT OF EXPENDITURE.

By order of the City Council, . . . . .	\$61,439 00	
By receipts, sale of lumber, . . . . .	228 34	
	<hr/>	\$61,667 34

## EXPENDITURES.

Land damages, . . . . .	\$12,965 00	
Engineering, . . . . .	604 18	
Filling, . . . . .	8,185 89	
Concrete abutments, . . . . .	7,220 85	
	<hr/>	
	\$28,975 92	
Unexpended balance, . . . . .	32,691 42	
	<hr/>	
		\$61,667 34



**CHESTNUT AND SPRINGFIELD STREETS, WIDENING.**

Limit of expenditure, from special appropriation, . . . . .	\$12,446 00
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**EXPENDITURES.**

Land damages, . . . . .	\$4,370 00	
Grading, . . . . .	1,382 43	
Macadam and gutters, . . . . .	2,405 74	
Removing trees, . . . . .	531 65	
Tar concrete walks, setting and resetting curbing, . . . . .	2,101 04	
	<hr/> \$10,790 86	
Unexpended balance, . . . . .	1,655 14	<hr/> \$12,446 00

**CITY YARD, SUMMER STREET.**

Limit of expenditure, previously reported, . . . . .	\$41,500 00	
Special appropriation, . . . . .	253 00	<hr/> \$41,753 00

**EXPENDITURES.**

Previously reported, . . . . .	\$26,917 03	
Barn and wagon house as per contract, . . . . .	9,582 96	
	<hr/> \$36,500 01	
Unexpended balance, . . . . .	5,252 99	<hr/> \$41,753 00

**PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.**

Limit of expenditure, . . . . .	\$32,117 00
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**EXPENDITURES.**

Land damages, . . . . .	\$6,657 00	
Widening and grading, . . . . .	5,032 18	
	<hr/> \$11,689 18	
Unexpended balance, . . . . .	20,427 82	<hr/> \$32,117 00

## WORK ITEMIZED.

## BRIDGES.

## REPAIRS AND CARE.

	Description of work.	Cost.
Armory street, over Boston & Albany Railroad,	New top floor,	\$252 40
Armory street, over N. Y., N. H. & H. Railroad,	Floor repairs,	14 03
Berkshire street, Red House Crossing,	Floor repairs,	14 60
Ludlow, I. O.,	New top floor,	515 70
North end,	Floor repairs,	173 82
Old Toll,	Floor repairs and care,	463 47
Pasco street, I. O.,	Floor repairs,	5 81
Plainfield street,	Floor repairs,	15 80
St. James avenue, over Boston & Albany Railroad,	New top floor,	279 35
South end,	New stringers and under floor in part, and new top floor,	2,026 27
		<hr/> \$3,761 25

## STREET CONSTRUCTION.

Fiscal year 1907.

## GRADING AND GRAVELING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Total cost.
* Bay road,	Berkshire street to Boston road,	1,800	4,000	\$651 25
Main street, I. O.,	Easterly of Ludlow bridge,	220	391	420 49
* Oakland street,	Belmont avenue to Sumner avenue,	716	3,182	403 01
Old Wilbraham road,	Pomona avenue to White street,	1,255	4,880	1,535 63
Parker street, I. O.,	Main street to Station 830 and Station 2600 to Oak st.,	1,856	4,522	1,936 20
	Total.	5,841	16,975	\$4,946 61

\*Grading only.

## MISCELLANEOUS WORK.

By orders of the City Council.

Alderman street,	Grading and tar concrete walks,	\$171 51
Pease street,	Tar concrete walk,	152 71
Pomona avenue,	Walk and curbing,	63 19
Scott street,	(Grading, setting curbing and tar concrete walks,	539 78
		<u>\$927 10</u>

NOTE.—This work has been done in connection with the construction of new streets.

## STREET CONSTRUCTION.

## MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Armory street, Banks place	Carew street southerly,	451	1,505	\$0 54	\$818 48
Beaumont street,	Dickinson street to Belmont avenue,	225	536	58	313 60
Birnie avenue,	Greenwich to Douglas street and Donald street to Wason avenue,	689	2,295	58	1,326 66
Howles street,	Bay to McKnight street,	2,762	5,379	1 13	6,253 31
Chase avenue,		750	2,500	54	1,346 54
Chestnut street,	Springfield street southerly,	583	1,943	1 16	2,251 19
Clarendon street,	Bay to Worthington street,	100	345		
Franklin street,	Charles to Cass street,	1,248	4,160	54	2,262 29
Heywood street,	Liberty to Warwick avenue,	1,082	3,605	57	2,044 61
Jackson street,	Sumner avenue to Maplewood terrace,	250	833	52	435 57
Loughill street,	Sumner avenue to Warner place,	283	943	43	406 61
Maplewood terrace,	Southerly roadway, completion,	475	2,321	61	1,407 25
Maplewood terrace,	Northerly roadway, Forest Park avenue to Riverview terrace,				140 64
McKnight street,	Sherman to Bowles street,	750	1,874	36	956 04
Munroe street,	Hancock street to Eastern avenue,	532	1,773	48	851 13
Murray Hill avenue,		1,345	3,736	46	1,706 03
Oak street, I. O.,	Main street northerly,	600	2,000	51	1,016 30
		360	1,680	55	929 34

## STREET CONSTRUCTION.

## MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Prospect street	Massasoit to Carew street, completion.				\$1,047 40
Randolph street,		283	943	\$0 47	446 90
She man street,	Bay to Clarendon street,	95	316	41	128 83
Springfield street,	Chicopee line southwesterly,	3,700	7,400	86	6,385 29
*Springfield street gutters,					
*Springfield street,	Chestnut street northeasterly,	400	1,355	49	845 11
Union street,	Water street to N. Y., N. H. & H. R. R.,	414	1,702	68	687 97
Waltham avenue,	Completion,				1,151 13
Warner place,		691	2,152	46	69 64
White street,	Orange to southerly line schoolhouse property,				999 55
		1,562	5,206	63	3,257 01
Woodside terrace,	Belmont avenue to Forest Park avenue,	463	1,543	51	790 45
Worcester street, I.O.,	Oak to Pine street,	500	2,000	53	1,067 57
	Less material paid for fiscal year 1908,	20,593	60,045		\$41,822 44
					647 98
					\$40,674 46

\*Cost of this work is not included in the expenditures of 1907.

## STREET CONSTRUCTION.

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total cost.
*Bridge street,	Water to Old Toll bridge,	Granite blocks,	249	713	\$1 07	\$761 64
**Court street,	Main street westerly,	Syracuse brick,		128		
Main street,	Liberty to Sharon street, west side,	Creo-resinate wood blocks,	(453)			
Main street,	Sharon to near Franklin and Emery, east side,	Creo-resinate wood blocks,	509	4,590	3 34	15,357 07
Main street,	Near Franklin, east side,	Syracuse brick,	36	144	2 61	376 84
**State street,	At St. James avenue,	Syracuse brick,		183		
*Summer street,	Spring to near Autumn street,	Granite blocks,	567	1,512	73	1,112 02
			1,361	7,270		\$17,607 57
	Less material paid for fiscal year 1908,					2,798 11
						\$14,809 46

NOTE.—The wood blocks and Syracuse brick are laid on Portland cement concrete foundation and cement mortar bed. The joints are filled with Portland cement grout.

\* Old granite blocks laid on sand foundation. Cost of blocks not included.

\*\* Paving laid at the expense of the Springfield Street Railway Company.

## STREET MAINTENANCE.

Fiscal year 1907.

## MACADAM RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Alden street.	Eastern avenue to N. Y., N. H. & H. R. R.,	695	2,316	\$0 14	\$312 69
*Chestnut street,	Montmorenci to Springfield street,	1,740	2,780	32	892 66
Ferry street,		1,490	3,808	21	811 91
Liberty street,	Main to Chestnut street,	1,405	5,854	18	1,041 28
Main street, I. O.,	Oak street easterly,				760 21
Mattoon street,		525	1,750	27	477 38
Oak street, I. O.,	Berkshire to Main street,	1,000	4,666	31	1,428 87
Pearl street,	Chestnut to Spring street,	980	2,508	15	370 90
Salem street,	Mattoon to Spring street,	677	2,256	27	615 40
State street,	N. Y., N. H. & H. R. R. east to Dresden st.,	2,500	13,084	30	3,938 91
		11,052	39,020		\$10,970 21

\* Cost of this work is not included in the expenditures of 1907.

# STREET MAINTENANCE.

## GENERAL REPAIRS.

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Abbe ave.,				\$223 87	\$223 87
Alden street,		\$123 53			123 53
Allen street,	\$787 96	11 16		150 76	949 88
Armory street,	156 85	6 91	\$28 78	5 39	197 93
Bay road,	147 02				147 02
Bay street,	68 58	91 17	94 57		254 32
Belmont ave.,	46 00	204 63	45 29	3 36	299 28
Berkshire st., I. O.,	407 07		32 32	68 97	508 36
Bircham Bend road,	93 67				93 67
Birnie ave.,		28 89	9 24		38 13
Boston road,	999 39		8 89		1,008 28
Bowdoin street,	18 74		21 70		40 44
Bridge street,		45 64		25 85	71 49
Buckingham st.	57 51		6 75		64 26
Burr street,	33 24				33 24
Carew street,		120 21	166 16		286 37
Central street,		146 16	13 07	11 96	171 19
Cherry street,	20 11				20 11
Chestnut street,		73 30	43 81	10 69	127 80
Clarendon st.,	57 97				57 97
Clinton street,		27 22			27 22
College ave.,	29 53				29 53
Colonial ave.,	30 96				30 96
Colton street,	32 35				32 35
Concord ter.,	20 70				20 70
Congress street,		36 52	9 84		46 36
Continental st.,			21 48		21 48
Cornell street,	52 77				52 77
Cortland street,	109 88				109 88
Dawes street,	37 25				37 25
Dexter street,	34 88				34 88
Dickinson st.	85 25	5 28	7 08		97 61
Donald street,			26 08	3 50	29 58
Dwight street,			36 21	21 76	57 97



## STREET MAINTENANCE.

## GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Eastern ave.,		\$160 47			\$160 47
Fairbanks pl.,				\$27 00	27 00
Ferry street,		21 14		2 37	23 51
Fiberloid street, I. O.,	\$15 58				45 58
Fort Pleasant ave.,	38 48	38 50			76 98
Franklin street,		14 64	\$1 10	7 94	23 68
George street,		44 80			44 80
Girard ave.,	35 59				35 59
Granville street,	22 21				22 21
Granada ter.,			127 40		127 40
Hall street,	1 90		29 10		31 00
Hampden st.,			3 88	40 32	44 20
Hampden st., I. O.,	23 59				23 59
Hancock street,	75 68	53 29	5 10	4 44	138 51
Hawley street,	27 00				27 00
Hickory street,		7 34		17 91	25 25
Keith street,	1 90		24 39		26 29
King street,	5 57	25 69	20 83		52 09
Liberty street,		222 37	133 40	17 20	373 06
Locust street,		158 54			158 54
Logan street,		29 53			29 53
Lyman street,		14 13	13 37	21 99	49 49
Magnolia ter.,	28 05				28 05
Main street,		3 66	145 93	241 37	390 96
Main st., I. O.,	229 76	208 53	23 36	5 92	467 57
Manhattan st.,	78 39				78 39
Maple street,		79 04	22 03	35 88	136 95
Marron street,	58 50		36 36		94 86
Mason street,	63 59		9 17		72 76
McKnight st.,	13 89		5 91		19 80
Mil. street,		91 18		5 59	96 77
Monmouth st.,	10 59				10 59
Monmouth street,	25 61				25 61

STREET MAINTENANCE.  
GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Mulberry street,		\$26 67			\$26 67
Myrtle st., I.O.,	\$30 82				30 82
Norfolk street,	2 16		\$96 24		98 40
North street,		24 48			24 48
North Main st.,		604 00	4 16	\$15 52	623 68
Northampton ave.,	45 41				45 41
Oak street,		18 50	4 00		22 50
Oak st., I. O.,	91 03	36 85	6 85		134 73
Oak Grove ave.,	35 37		12 28		47 65
Osgood street,		14 40	14 95		29 35
Parker street,	911 18				911 18
Pasco st., I.O.,	48 49			14 71	63 20
Patton street,		29 13			29 13
Pease street,	16 85		25 30		42 15
Piney woods ave.,	35 44				35 44
Plainfield st.,		33 92	7 04	202 30	243 26
Plumtree road,	331 74				331 74
Pyncheon street,		93 63	15 58		109 21
Queen street,	45 80				45 80
Sanford street,		14 65		18 53	33 18
St. James ave.,	167 20	26 52	86 10		279 82
Sharon street,		51 36			51 36
Sixteen Acre road,	70 55				70 55
Spring street,		37 26			37 26
Springfield st.,		35 77			35 77
Spruceland ave.,	20 17				20 17
State street,		946 84	45 72	931 92	1,924 48
Stebbins street,	73 70		24 94		98 64
Stony Hill road,	26 03				26 03
Summer street,		12 04		145 03	157 07
Sumner ave.,	165 70	27 87			193 57
*Sundry streets,	458 13	401 92	700 96	178 50	1,739 51
Talcott ave.,				141 26	141 26

\*Individual street repairs costing less than \$200.00.

**STREET MAINTENANCE.****GENERAL REPAIRS.—CONTINUED.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total cost.
Taylor street,		\$8 36		\$36 95	\$45 31
Tinkham road,	\$91 84				91 84
Tyler street,	58 87				58 87
Union street,		146 20	\$2 43	4 22	152 85
Vernon street,		8 66		75 01	78 67
Walker street,				36 75	36 75
Walnut street,		175 80		271 51	447 31
Water street,		189 93	6 19		196 12
White street,	95 09		9 82		104 91
Wilbraham ave.,	106 81				106 81
Wilbraham rd.,	995 98	155 17	14 01	17 60	1,182 76
Willow street,		133 10			133 10
Worcester ave.,				122 76	122 76
Worcester st.,					
I. O.,	250 68	59 01	7 60	43 03	360 32
Worthington st.		154 70		101 24	256 03
	\$8,393 02	\$5,540 80	\$2,256 77	\$3,310 97	\$19,501 56

## SIDEWALKS AND CURBING.

Fiscal year 1907.

## CONSTRUCTION AND RECONSTRUCTION.

By orders of the City Council.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet.		Order approved.
		Material.	Description.	4"	6"	
Acushnet ave.,	1,275	Brick,	Relaid,			June 25, 1907.
Adams street,	1,754	Brick,	Relaid,			Oct. 23, 1906.
Adams street,	50	Tar concrete,	Skim coated,			Oct. 23, 1906.
Alderman street,	1,457	Tar concrete,	New,	2,356		Jan. 15, 1907.
Banks place,				266		Oct. 27, 1906.
Belmont ave., easterly side,	291	Tar concrete,	Skim coated,			Apr. 16, 1907.
Birnie ave.,	3,846	Brick,	New,	578		Apr. 16, 1907.
Chestnut street, easterly side,					441	Feb. 25, 1907.
Cortland street,	400	Tar concrete,	New,	1,095		May 28, 1907.
Cortland street,	900	Tar concrete,	Skim coated,			May 28, 1907.
Hebron street,	200	Brick,	Relaid,			June 26, 1906.
Market street, easterly side,	76	Brick,	Relaid,			July 2, 1907.
Mason street,				673		Apr. 11, 1906.
Norfolk street,				2,928		Apr. 16, 1907.
Pease street,	116	Tar concrete,	New,			(Special order Maynard's lot.)
Reed street,				296		Aug. 20, 1907.

## SIDEWALKS AND CURBING.—CONTINUED.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet.		Order approved.
		Material.	Description.	4"	6"	
Scott street,	685	Tar concrete,	New,	600		Nov. 1, 1906.
Union street, at Hancock,				69		Apr. 29, 1907.
Union street, at Oak,	181	Brick,	New,	176		Jan. 15, 1907.
Washburn, at Plainfield,				50		Oct. 2, 1906.
Woodside terrace,	121	Tar concrete,	New,			Sept. 11, 1905.
				9,087	441	

# SIDEWALKS AND CURBING.

## CONSTRUCTION BY ORDERS OF ABUTTERS.

Street.	Length in feet.	SIDEWALKS.		CURBING.	
		Material.	Description.	Length in feet.	
				4"	6"
et.				47	
at avenue,				70	
ire street, I. O.,				77	
t street,	50	Tar concrete,	Skim coated,		
t street,	1,309	Tar concrete,	New,		1,402
street,	50	Brick,	Relaid,		
asant avenue,	100	Tar concrete,	Skim coated,		
ok street,				551	
ht glen,				328	
neous streets,				116	
d street,				541	
et, I. O.,				142	
reet,	125	Brick,	New,		
reet,	48	Tar concrete,	New,	243	
street,				46	
avenue,	84	Tar concrete,	New,		
eld street,				434	
street,	135	Tar concrete,	Skim coated,		
				2,595	1,402

ing furnished by owner of abutting property.

## STREETS MADE PUBLIC.

Name.	Limits.	Length in feet.	Width in feet.
Clantoy street,	Phoenix street southeasterly,	1,250	50
Donald street,	North Main street to Birnie avenue,	444	50
Franklin street,	Murray Hill avenue to Nursery street,	248	50
Logan street,	King to Alden street,	1,167	48
Malden street,	Allen to Grand street,	878	50
Oakland street,	Belmont ave. to Sumner ave.,	716	60
Old Bay road,	Berkshire st. to Boston road,	1,830	50
Pecousic avenue,	Near Mill river to Main street (at Leary's line),	2,654	100
Phoenix street,	Liberty street northeasterly,	570	50
Pineywoods avenue,	Forest Park avenue to Forest Park,	2,110	60
Reed street,	State st. to Wilbraham road,	654	54
Ridgewood terrace,	Union to Mulberry street,	861	18 to 30
Shattuck street,	Oak Grove avenue to Cortland street,	1,214	50
Silver street,	Armory street easterly,	500	50
Westernview street,	Mountainview st. to Forest Park avenue,	615	50
		15,706	

## STREETS WIDENED:

Name.	Limits.	Length in feet.	Width in feet.
Chestnut street,	Montmorenci to Springfield street,	1,712	80
*Main street, I. O.,	Ludlow avenue to Wilbraham line,	298	66
Pecousic avenue,	North and south at Mill river,	754	100
Springfield street,	Chestnut street to a by-road,	1,895	80
		4,659	

\*Widened by the County Commissioners.

# INVENTORY.

## STREET AND SEWER DEPARTMENTS.

### Buildings and structures.

Barn and wagon house, . . . . .	\$13,000 00
Scales, . . . . .	350 00
Trap rock bin, . . . . .	4,500 00
Engine house, engine, trap rock crusher and tools, . . . . .	1,500 00
Steam roller house, . . . . .	1,200 00

### Horses, wagons, etc.

Automobile, . . . . .	400 00
Seventeen horses, . . . . .	3,100 00
Two mules, . . . . .	450 00
Fifteen wagons and cars, . . . . .	1,695 00
Ten sleighs, sleds, etc., . . . . .	315 00
Harness, etc., . . . . .	1,046 50

### Lands.

City yard, Logan street, . . . . .	7,000 00
City yard, Summer street, . . . . .	23,000 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Island pond, . . . . .	380 00
Gravel bank, Boston road, . . . . .	80 00
Trap rock quarry, Westfield, . . . . .	225 00

### Office furniture, . . . . .

317 00

### Rollers.

Horse rollers, . . . . .	330 00
Sixteen steam rollers, . . . . .	9,800 00

### Special tools and machines.

Concrete mixer, boiler and engine, . . . . .	900 00
Hoisting engine, boiler and derrick, . . . . .	700 00
Macadam scraper, . . . . .	100 00
Road machines, . . . . .	100 00
Sanding machine, . . . . .	200 00
Scarifier, . . . . .	500 00
Sewer pump and portable boiler, . . . . .	25 00
Street sweepers and cleaning equipment, . . . . .	748 00

### Street and sewer materials.

Castings and patterns, . . . . .	557 33
Cement, . . . . .	44 53



Coal, oil, etc., . . . . .	\$595 15
Lumber, . . . . .	2,645 82
Sand and sand tickets, . . . . .	50 00
Trap rock, . . . . .	839 44
Vitrified clay and wood blocks, . . . . .	1,028 00
Vitrified clay pipe, . . . . .	195 37
Street watering equipment.	
Thirty-two sprinkling wagons, . . . . .	5,572 00
Tools and supplies, miscellaneous.	
Lanterns, globes, etc., . . . . .	184 92
Machine shop tools and supplies, . . . . .	313 73
Sidewalk tools and materials, . . . . .	1,275 71
Street and sewer tools, . . . . .	3,516 26
	<b>\$38,879 56</b>

## GENERAL DESCRIPTIONS.

### PAVING.

The completion of the laying of smooth paving in Main street, by substituting wood for the granite blocks between Liberty and Franklin streets, is probably the greatest single paving improvement made during the year. The total cost of this work was \$15,357.07 or \$8.34 per square yard, which is slightly less than the cost of similar work in previous years. As heretofore, the wood is guaranteed against defects and decay for ten years. The blocks are made from gum wood and have been laid by departmental labor on cement concrete foundation and mortar bed. The concrete was mixed by machine, and was laid to a depth of four and one half to five inches.

### MACADAMIZING.

Streets aggregating 20,598 feet in length have been macadamized during the year at a total cost of \$41,322.44. This length is somewhat in excess of that of preceding years.

**STREET CONSTRUCTION AND WIDENING.**

The old Wilbraham road, relocated October 15, 1906, connecting Pomona avenue and White street, was graded and graveled at a cost of \$1,535.63.

By an order of the City Council, approved February 25, 1907, Chestnut and Springfield streets have been widened to a uniform width of 80 feet between Montmorenci street and a by-road at the top of Springfield street hill, entailing land damages estimated at \$8,071. The cost of the work was \$4,015.12.

As these streets lead to the largest nearby community, the additional width is most necessary to and will be much appreciated by the driving community.

Main street, Indian Orchard, has been widened on its northerly side, easterly of the Ludlow bridge, by order of the County Commissioners, at a total cost of \$420.49.

An order of the City Council, approved January 4, 1907, provides for building Pecousic avenue to a uniform width of 100 feet from Mill river southerly, for a distance of 3,357 feet, and a part of the preliminary rough grading has been done by this department at a cost of \$5,032.18.

In connection with this work, the contract for the construction of a reinforced concrete arch bridge over Mill river, having a span of twenty-four feet and length of one hundred feet, has been awarded to the Culgin, Pace Construction Company of New York, for the sum of \$9,600.00.

A crossing over the Boston and Maine railroad, in the vicinity of Abbe avenue, has been provided by order of the City Council, approved May 13, 1907.

This is estimated to cost approximately \$61,439.00 and will consist of a macadamized roadway and one sidewalk on earth filling, on either side of a single span steel bridge, about one hundred and seventy-six feet long.

The earth filling, now nearly complete, has been done by departmental labor, and in part by contract with F. T. Ley & Co. of this city.

The concrete abutments have been built by this department, and the contract for the bridge has been awarded to the Boston Bridge Works, for the sum of \$14,999.00.

This crossing will probably be ready for use during the early part of the coming summer.

#### BRIDGES.

The strengthening of the Plainfield street bridge, at the expense of the Springfield Street Railway Company, referred to in the report of last year, has been completed. The condition of the bridge was worse than was anticipated at the time the work was begun.

The South End bridge over the Connecticut river, the Armory street and St. James avenue bridges over the Boston and Albany railroad, and the Ludlow bridge have been replanked at a total cost of \$8,073.72. The sum includes the cost of renewing a part of the stringers and under-flooring in the South End bridge.

#### SIDEWALKS AND CURBING.

Sidewalks have been laid and repaired in eighteen streets, in accordance with orders of the City Council.

#### WATERING STREETS.

Streets aggregating 85.86 miles in length have been watered during the year, an increase of 2.18 miles over the mileage of last year.

The work, as usual, has been done directly by this department. Sprinkling cars, owned by the American Car Sprinkler Company of Worcester, have been operated by contract. Contracts for teams and drivers at the rate of \$100 per month have been made for operating the carts, which are owned by the city.

#### SNOW REMOVAL.

In accordance with the provisions of Statute 1906, Chapter 463, Part III, Section 75, the requirements relating to snow

removal by the Springfield Street Railway Company during the winter of 1907 and 1908 were filed with the Board of Railroad Commissioners, Boston.

These requirements were identical with the arrangements governing snow removal by the above Company, during the winter of 1906 and 1907.

#### SPRINGFIELD STREET RAILWAY COMPANY.

The Springfield Street Railway Company, by the consent of the Board of Supervisors, has adopted a new type of rail for use in paved and other heavily trafficked streets. This is a grooved girder rail, weighing one hundred and twenty-five pounds to the yard and known as Section No. 273.

It was found that the life of the Trilby rail heretofore used was too short to warrant its use, frequent renewal being necessary.

The T rails in Worthington and King streets, which were so badly worn as to render their use no longer advisable, were replaced by the new type of rail and by request of the Supervisors the new rail has been laid in Main street, between Liberty and Franklin streets, where the wood block paving was laid this year.

In connection with its Main street work, the Railway Company is to be especially commended for the adoption of a concrete bed under the ties. It is expected that this track construction will endure for a number of years and that we will be spared annoyances caused by the continual digging up of this pavement.

It seems probable that the rails in Main street, between Liberty and Bliss streets, will soon require renewal and it is hoped that the Railway Company will adopt a suitable foundation for them.

The Board of Aldermen has authorized the following:—

The track terminating in Elm street has been continued

around Court Square, and single connections have been made with the north and south bound tracks in Main street.

The single track connecting the double tracks in St. James avenue and State street has been replaced by double track connections, and turnouts have been provided in Worthington street, westerly of Kibbe avenue, and in King street, near Walnut street.

Double branch curves have been authorized on Main street at State and Lyman streets; on State street at Walnut and Hancock streets, and on North Main street at Wason avenue, and it is probable that these will be installed during the coming summer.

The franchises require that concrete shall be laid under the rails of all special steel included in the above and that paving shall be laid between rails and tracks and eighteen inches outside thereof.

#### CITY YARD.

The barn and wagon house at the new yard on Summer street, authorized by order of the City Council, approved October 2, 1906, referred to in my last report, were ready for occupancy in March, 1907, at which time the Lyman street yard was vacated.

The necessity for new buildings and increased yard room has been apparent for a number of years, and the improved facilities enable more economical conduct of the affairs of the Street and Sewer Departments.

During the year the Boston and Albany Railroad, New York Central Railroad, Lessees, acquired by condemnation proceedings May 31, 1907, a part of the Summer street yard, amounting to about 5,850 square feet. As compensation for this taking, the Railroad Company is willing to deed a corresponding area of land bordering on the northerly side of the city yard, and it is expected that this exchange will be made.

A contract for a new wagon shed suitable for housing sixteen vehicles, westerly of the wagon house, has been awarded to W. A. Newton & Co. of this city for the sum of \$2,853.

Certain changes made by the Boston and Albany Railroad Company prevent the city from using the Boston and Albany trestle, where for a number of years our trap rock has been unloaded from cars and stored, and on this account, and for other reasons, on recommendation of the Board of Supervisors, the City Council authorized the construction of a trap rock storage bin, with superimposed trestle, at the northerly side of the city yard, at an estimated cost of \$7,500.

By means of this trestle, which is connected with the Boston and Albany railroad, the rock will be discharged directly from bottom dump cars to the bin. Suitable gates are provided in the bottom of the bin to deliver the rock to the carts underneath. Not only does this arrangement save the cost of shoveling rock into the carts but the time that the teams are standing idle while the carts are being loaded is greatly reduced.

Since the year 1900 we have handled 15,000 to 18,000 tons of rock annually at this point, and the bin will enable an annual saving of \$2,000 or more.

The reinforced concrete bin was designed and built by the Turner Construction Company of New York and the trestle will be finished early in the new year.

#### ROAD PRESERVING AND DUST LAYING.

During the past year or two a great many varieties of road preserving and dust laying materials have been exploited, on account of the destruction of macadamized roads about the country by rapidly moving motor cars.

For the most part, these materials are based upon coal tar and oil and the claims set forth by the patentees and promoters of some of them are most fanciful.

It is a fact that but few of our outlying roads are at all affected by automobile traffic, but if a satisfactory material could be used to lay the dust and so reduce the cost of street sprinkling, we would be pleased to recommend its adoption.

**PAY OF FOREMEN.**

By vote of the Board of Supervisors of Highways and Bridges, February 27, 1907, the foremen in the employ of this Department are guaranteed work during eight months of each year, beginning April 1st.

During the four winter months remaining, the foremen are guaranteed pay for three-fourths time, and if employed more than that number of working days, they are paid for the additional time at their regular rates of wages.

**CONCLUSION.**

It gives me pleasure to acknowledge the co-operation of Mr. A. H. Woodward, Assistant Superintendent of Streets, and to thank the various foremen and men through whose efforts the success attained by the Department during the year is largely measured.

The uniform courtesies extended by Mayor William E. Sanderson, Alderman Willis A. Ford, and Councilman Winthrop I. Davis, members of the Board of Supervisors of Highways and Bridges, are acknowledged and I also thank them for their co-operation.

Respectfully submitted,

**ARTHUR A. ADAMS,**

*Superintendent of Streets.*

*Report on Streets.*

33

BOARD OF ALDERMEN, December 30, 1907.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 30, 1907.

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 31, 1907.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1907.

Approved.

W. E. SANDERSON, *Mayor.*



## MACADAM REPLACED BY PAVING.

STREET.	Limits.	Length in feet.	Area in sq. yds.
Bridge street.	Water to Old Toll bridge,	249	713
State street,	at St. James ave.,	—	183
Summer street,	Spring to near Autumn.	567	1,512
		816	2,408

## PAVING REPLACED BY OTHER PAVING.

## ROCK ASPHALT BY SYRACUSE BRICK.

STREET.	Limits.	Length in feet.	Area in sq. yds.
Court street,	Main street westerly,		128

## GRANITE BLOCKS BY WOOD BLOCKS.

Main street,	Liberty to Sharon, west side,		1,460
Main street,	Sharon to near Franklin and Emery,	545	2,920
		545	4,380

TABLE OF MACADAMIZED STREETS.

\*Includes Macadam laid by Spfd. Street Ry. Co.

\*\*Macadam laid by Spfd. Street Ry. Co.

†Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
†Agawam street,	Pecousic avenue to South st.,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Allen street,	Mill to Randall avenue,	2,253	*7,935
Allendale street,		663	2,094
Amherst street,	Harvard to Monmouth street,	1,233	4,069
Andrew street,	State to Dawes street,	1,323	4,228
Arbor street,		437	1,222
Armory street,	Federal to Warwick avenue,	2,305	7,688
Armory street,	Liberty to Carew street,	1,570	5,203
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
†Avon place,		67	386
Bancroft street,		1,435	4,865
Banks place,		225	536
Barnes street,		180	561
Bay street,	St. James avenue to Cam- bridge street,	1,469	*14,853
Beaumont street,	Dickinson to Belmont ave.,	689	2,295
Beech street,		528	1,303
Belmont avenue,	Woodside ave. to Oakland st.,	2,599	7,043
Belmont avenue,	Sumner avenue to White st.,		**3,700
Belmont avenue,	south side Garfield street to Sumner avenue,	1,624	4,170
Berkshire street,	State to Oak, I. O.,		**31,291
Birnie avenue,	Greenwich st. to Douglas st., ) Donald to Wason avenue, )	2,762	5,379
Bliss street,	Main to N. Y., N. H. & H. R. R.,	1,229	3,956

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Worth- ington street,	1,152	3,637
Bowles street,	Bay to McKnight street,	750	2,500
Boylston street,		1,807	861
Bradford street,		862	2,935
Bridge street,	Water street 250 feet, and Dwight to Chestnut,	568	2,296
Broad street,		959	3,177
Brookline avenue,		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,467
Catharine street,	Bay to Dartmouth,	150	488
Cedar street,		1,962	6,655
Central street.		4,903	12,632
Central street,	Cedar to Mill,		**2,765
Charles street,	Liberty to Franklin,	618	1,868
Chase avenue,		583	1,943
Chestnut street,	State to Worthington, and east side, Jefferson ave. to Springfield street,	3,164	7,846
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clark street,		619	1,100
Clarendon street,	Bay to 200 feet north of Worthington,	1,452	4,334
Clinton street,		708	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court Square ave.,	689	2,082
Cross street,	Willow to Maple,	608	1,416

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Dale street,		812	2,051
Dartmouth street,		1,132	5,150
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliott street		1,007	3,342
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818	2,089
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Everett street,		1,500	4,859
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,	Talcott to Wason,	1,126	5,005
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,666
Forest street,		784	2,502
Forest Park avenue,	Sumner ave. to Forest street,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475
Fort Pleasant avenue,	west side,	2,794	10,138
Franklin street,	Main to Webster street,	3,613	12,386
Fremont street,		778	2,593
Fulton street,	Plainfield to Vine,	2,444	8,087
Gardner street	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
George street,	Maple easterly,	110	647
Grace street,		354	885
Grant street,		577	1,603
Gray's avenue,		560	1,300

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,744
Grosvenor street,		738	2,286
Hancock street,	Florence to State,	3,429	*11,613
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorn street,		540	1,374
Hebron street,		698	2,204
Heywood street,	Liberty to Warwick ave.,	250	833
Hickory street,	Walnut to Sheffield st., and Alden street easterly,	3,341	8,547
High street,		2,363	5,544
Holyoke street,		776	2,001
Homer street,		582	1,940
Howard street,	N. Y., N. H. & H. R. R. to Main street,	1,277	4,326
Hubbard avenue,		568	1,063
Huntington street,		643	†2,143
Ingraham avenue,		258	462
Jackson street,	Sumner avenue to Maple- wood terrace,	283	943
James street,		928	2,356
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Kibbe avenue,		213	710
King street,	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,885	*9,507
Lafayette street,		568	1,846
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,650
Leyfred terrace,		625	2,102
Liberty street,	Main street easterly, and Wal- cott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chicopee line,		**9,920
Lillian street,		387	960

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Linden street,		1,287	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Longhill street,	Sumner ave. to Warner place,	475	2,321
Loring street,		707	2,294
Lyman street,	Chestnut to Spring,	734	2,544
Madison avenue,		529	1,657
Magazine street,	Lincoln to Armory,	734	2,434
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Front street to point 104 ft. east of Rogers ave.,	4,403	15,953
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George street,	1,565	4,572
Maplewood terrace,	south side, Fort Pleasant ave. to Forest Park avenue,	1,301	3,075
Maplewood terrace,	north side, Forest Park ave. to Riverview terrace,		1,874
Marble street,		1,074	3,508
Margaret street,	Water to Main,	842	2,807
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
McKnight street,	Sherman to Bowles street,	532	1,773
Medford street,	N. Main st. to Birnie ave.,	624	2,080
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Monroe street,	Hancock to Eastern ave.,	1,345	3,736
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mulberry street,	Maple to Ridgewood place,	991	3,256
Murray Hill avenue,		600	2,000
Myrtle street,		484	997
North street,	Carew to Waverly,	2,988	10,807
North Main street,	Morgan to Chicopee line,	6,285	32,680
Norwood street,		1,117	2,911
Oak street,		1,344	4,136

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Oak street, I. O.,	Berkshire to Water street,	1,457	5,731
Oak street, I. O.,	Berkshire to Main,		**2,078
Oakland street,	Belmont ave. to Allen street,	3,422	11,454
Olive street,		478	1,348
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow, and foot of hill to Maple,	865	2,545
Patton street,		1,631	5,483
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	South street to South street,	2,205	7,350
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344
Plainfield street,	B. & M. R. R. to Newland street, and Rowland ave. to Wason avenue,	3,079	8,646
Plainfield street,	Washburn to Wason avenue,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597
Portland street,	N. Main to Birnie avenue,	610	2,033
Princeton street,	Bay to St. James avenue,	1,509	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Prospect street,	Massasoit to Carew street,	817	2,996
Pyncheon street,		868	2,810
Quincy street,	Oak to Eastern avenue,	2,704	7,780
Randolph street,		283	943
Ringgold street,		790	2,432
Rutland avenue,		277	926
Rutledge avenue,		516	1,599
Salem street,	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,375
Sargeant street,		860	3,136
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Whington street,	Water to Cook's ave., and Spring to St. James ave.,	3,830	5,375
street,	Dartmouth to Monmouth,	1,493	5,142
street,		1,000	2,997
Total,		318,894	1,105,031



TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Belmont avenue,	11th street westerly,	Catskill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,028	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	483	1906
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1905
Bridge street,	Water street to Old Toll bridge,	Granite blocks,	249	713	1907
Catharine street,	State to Bay,	Syracuse brick,	1,722	6,691	1900
Charles street,	Liberty to land of B. & A. R. R.	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.,	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,285	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson ave.,	Bitulithic,	325	2,898	1905
Court street,	Main to Court Square ave.,	{ Rock asphalt, Syracuse brick,	317	1,149	1897
		{ Syracuse brick,	—	174	1897
		{ Rock asphalt,	—	128	1907
		{ Syracuse brick,	198	508	1897
Court square avenue,	Court to Elm st.,	{ Rock asphalt, Syracuse brick,	—	880	1897
Cypress street,	Main street westerly,	Granite blocks,	459	1,700	1904

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Cypress street,	Boylston to Fulton,	Granite blocks,	216	848	1905
Dwight street,	State to Lyman,	Syracuse brick,	2,324	9,905	1898
East Court street,	Main to Market,	Rock asphalt,	117	297	1900
Elm street,	Main to Court Square ave.,	{ Rock asphalt, Syracuse brick,	343	949	1897
Fort street,	Main to Water,	Granite blocks,	—	330	1897
Fulton street,	Cypress to Vine,	Granite blocks,	670	1,770	1895
Hampden street,	Main street westerly,	Granite blocks,	1,125	3,006	1906
Hampden street,	completion, Main to Water,	Bitulithic,	212	821	1904
Harrison avenue,	Main to Dwight,	Bitulithic,	394	1,539	1905
Hillman street,	Main to Dwight,	Trinidad asphalt,	586	2,247	1896
Liberty street,	Chestnut to Cass,	Bitulithic,	648	2,025	1906
Liberty street,	Cass to Heywood ave.,	Syracuse brick,	1,399	4,571	1900
Lyman street,	Main to Chestnut,	Syracuse brick,	1,147	3,971	1901
Main street,	Locust to Marble,	Granite blocks,	1,305	4,599	1889
Main street,	Marble to William,	Syracuse brick,	840	4,381	1897
Main street,	William to Bliss,	Syracuse brick,	1,762	8,307	1896
		Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	1,150	6,460	1906
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	1,899	10,798	1904

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Worthington to Hampden, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	382	1,183	1904
Main street,	Worthington to Hampden, east side,	Creo-resinate wood bl'ks, 4" x 4' x 8",	962	962	1903
Main street,	Hampden to Lyman.	Creo-resinate wood bl'ks, 4" x 4" x 8",	153	775	1903
Main street,	Lyman to Liberty.	Creo-resinate grooved, wood bl'ks, 4"x4"x8"	484	2,780	1903
Main street,	Liberty to Sharon, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	453	1,135	1903
Main street,	Liberty to Sharon, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	—	1,487	1907
Main street,	Sharon to near Franklin and Emery,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	509	3,103	1907
Main street,	near Franklin, east side,	Syracuse brick,	36	144	1907
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,802	4,605	1897
Main street,	Emery to Sargeant, west side,	Catskill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street, Catskill and Metropolitan blocks,		—	163	1903
Maple street,	Central to High.	Bitulithic.	1,563	5,665	1904

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison ave.,	Bitulithic,	968	1,887	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Railroad street,	Main to Water,	Granite blocks,	516	1,539	1906
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main to library,	Granite blocks,	1,019	4,034	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	at St. James ave.,	Syracuse brick,	—	183	1907
State street,	Sherman to Highland Div.,				
	N. Y., N. H. & H. R. R.,	Bitulithic,	820	4,352	1905
Summer street,	Spring to near Autumn st.,	Granite blocks,	567	1,512	1907
Summer street,	Autumn to Kibbe ave.,	(Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,	(Granite blocks,	787	2,635	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave., to Lebanon st.,	Bitulithic,	1,195	3,888	1905

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,384	1906
White street,	Allen to Orange,	Syracuse brick,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring.	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Cook's ave.,	Bitulithic,	404	1,418	1905
Total			52,970	198,907	

## RECAPITULATION.

Material.	Length in feet.	Area in sq. yds.	Material.	Length in feet.	Area in sq. yds.
Bitulithic,	10,620	39,168	Metropolitan blocks,	1,028	996
Catakill blocks,	2,809	6,741	Rock asphalt,	1,760	5,630
Creo-resinate wood blocks,	5,030	28,688	Syracuse brick,	19,534	77,446
Granite blocks,	11,463	37,513	Trinidad asphalt,	596	2,247
Johnsonburg blocks,	145	488			
Total.				52,970	198,907

THIRTY-NINTH ANNUAL REPORT  
OF THE  
**SEWER DEPARTMENT.**

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SPRINGFIELD, MASS., December 28, 1907.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending November 30, 1907.

**RECEIPTS.**

By appropriation, Sewers and Drains,	\$30,000 00	
Sewer entrances, for fees,	14,073 86	
Sewer entrances, for building private drains,	5,364 15	
From departments and private parties,		
bills rendered,	3,003 57	
		\$52,441 58
By special appropriation for building		
Pecousic avenue, Main, Longhill,		
Carew and Armory street sewers,		20,000 00
		\$72,441 58

**EXPENDITURES.**

Building private drains,	\$4,588 78
Refunds on account of fees for sewer entrances,	151 00
Refunds—unexpended balances on depos-	
its for building private drains,	211 20
City teams, uncredited balance,	414 50
	\$5,365 48
Amount carried forward,	

*Report on Sewers.*

Amount brought forward,	\$5,365 48
City yard, . . . . .	1,109 63
Engineering, . . . . .	598 17
Materials on hand, . . . . .	1,010 95
Office and general expenses, . . . . .	1,220 60
Salary of first assistant superintendent,	1,375 00
Sewers, { cleaning, . . . . .	1,415 71
{ construction, . . . . .	33,065 19
{ flushing, . . . . .	2,154 67
{ repairs, . . . . .	631 69
Supplies, . . . . .	191 68
Tools, . . . . .	1,126 08
Foremen's winter and holiday pay, . . . . .	147 46
Work and material charged to departments,	2,447 84
Work and material charged to private parties,	258 15
	<hr/>
	\$52,118 30
Unexpended balance, . . . . .	323 28

For building the Pecousic avenue, Main,  
Longhill, Carew and Armory street  
sewers, . . . . .

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**BILLS RECEIVABLE.**

Bills receivable, December 10, 1906, . . . . .	\$79 95
Bills committed, fiscal year 1907, . . . . .	16,273 48
	<hr/>
Bills paid, fiscal year 1907, . . . . .	\$15,530 33
Abatements, . . . . .	310 81
	<hr/>

Bills receivable November 30, 1907,

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SEWER CONSTRUCTION CLASSIFIED.

VITRIFIED CLAY PIPE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
8"	414'		414'
10"	4,814'	1,889'	6,703'
12"	5,719'	1,440'	7,159'
15"	4,556'	85'	4,641'
18"	1,537'	342'	1,879'
20"	513'	283'	796'
24"	136'		136'
Total,	17,689'	4,039'	21,728'

BRICK AND CONCRETE.

SIZES.	LENGTH IN FEET.			Total
	New Construction.		Reconstruction.	
2'-0"x3'-0" egg shape.....	Concrete	114'	717'	831'
2'-2"x3'-3" " " .....	"	648'		648'
2'-4"x3'-6" " " .....	"	191'		191'
2'-6"x3'-9" " " .....	"	1,365'		1,365'
2'-8"x4'-0" " " .....	"	327'		327'
2'-8" circular.....	"	989'		989'
2'-10"x4'-3" elliptical.....	Brick-concrete	416'		416
3'-0"x4'-6" " .....		245'		245'
		4,295'	717'	5,012'



## SEWER CONSTRUCTION AND RECONSTRUCTION.

## DESCRIPTIONS AND COSTS—FISCAL YEAR 1907.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Armory street, Carew street north- erly to Truant School.....	Clay	452 803	20" } 10" }	\$1,066 91
Beaumont street, Belmont avenue to Sumner avenue.....	Clay	264	10"	161 92
Belmont avenue, Lawndale street to Woodlawn street.....	Brick- Con- crete	245 416	3'-0" x 4'-6" } 2'-10" x 4'-3" } elliptical }	3,470 41
Berendo avenue, Grenada terrace to Alderman street.....	Clay	345	12"	282 67
Berkshire street, I. O., Oak street easterly, extension .....	Clay	61	12"	84 38
Birmie avenue, Medford street south- erly.....	Clay	168	15"	158 56
Bloomfield street, Oakland street easterly .....	Clay	500 361	18" } 15" }	1,287 86
Bowdoin street, extension southerly.	Clay	285	12"	371 52
Bowdoin street, manhole.....		....	....	36 28
Carew street, Liberty street east- erly.....	Clay	502 499 434	15" } 12" } 10" }	1,501 27
Carew street, Prospect street to Ar- mory street.....	Con- crete	989 1365	2'-8" cir. } 2'-6" x 3'-9" } egg shape }	8,487 12
Center street, I. O., flush gate.....		....	....	23 58
Chapin terrace, Chestnut street east- erly.....	Clay	327 279	15" } 12" }	1,124 82
Colonial avenue, flush gate.....		....	....	23 65

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Congress street, Garden brook westerly to Main street, relaying ..	Clay	319	12"	\$705 44
Continental street, extension southerly.....	Clay	64	10"	24 74
Daytona street, Belmont avenue to Sumner avenue.....	Clay	524	12'	467 07
Donald street, flush gate.....		....	....	18 10
Essex street, I. O., two flush gates ..		....	....	50 63
Farnsworth street, Hamburg street northerly, completion.....	Clay	344	20"	1,045 03
Franklin street, manhole.....		....	....	37 86
Grenada terrace, extension easterly to Pomona street.....	Clay	233 216	12" } 10" }	344 56
Grover street, flush gate.....		....	....	12 52
*Hall street, Dickinson street southerly.....	Clay	774	12"	698 29
*Keith street, Dickinson street southerly.....	Clay	350 301 186	15" } 12" } 10" }	823 06
Kenwood terrace, Belmont avenue to Sumner avenue.....	Clay	218 197	12" } 10" }	276 21
Liberty street, Grover street to Wentworth avenue.....	Clay	487 714	18" } 15" }	2,101 62
Logan street, Collins street southerly	Clay	97	10"	109 36
Longhill street, Cherryvale avenue to Spruceland avenue, relaying ..	Clay	327	12"	365 41
Longhill street, Main street southerly	Clay	136 265 234	24" } 18" } 15" }	1,298 32
	Concrete	90	2'-0"x3'-0" } egg shape }	447 63

\* Surface drainage only.

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Magnolia terrace, east roadway, Sumner avenue to Spruceland avenue, relaying.....	Clay	620	10"	\$515 42
Magnolia terrace, west roadway, Sumner avenue to Spruceland avenue, relaying.....	Clay	621	10"	575 75
Main street, Cypress street to Emory street.....	Clay	298 270	15" } 12" }	1,210 56
Main street, Pecousic avenue to Longhill street.....	Concrete	191	2'-4"x3'-6" } egg shape }	1,077 51
Main street, I. O., Chicopee River through private land to Main street, thence westerly to Beaudry street.....	Clay	285 232 212	18" } 15" } 10" }	1,055 75
Main street, I. O., Parker street westerly.....	Clay	260	12"	254 89
Middlesex street, Wilbraham road southerly.....	Clay	296 304	15" } 12" }	580 26
Oak street, Union street to State street, rebuilding.....	Concrete	741	2'-0"x3'-0" } egg shape }	3,051 52
Oakland street, Sumner avenue to Garfield street.....	Clay	280 221	12" } 10" }	446 44
Parker street, I. O., flush gate.....		....	....	25 74
Pecousic avenue, Mill river to Main street.....	Concrete	327	2'-8"x4'-0" } egg shape }	2,061 84
Plainfield street, Rowland avenue southerly.....	Concrete	648	2'-2"x3'-3" } egg shape }	3,402 82
Pomona street, extension northerly..	Clay	297	10"	204 92
Ringgold street, flush gate.....		....	....	27 50
Rogers avenue, I. O., Main street southerly..	Clay	97 152	15" } 12" }	312 13
Scott street, White street to Pomona street.....	Clay	300 347	12" } 10" }	468 68

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Jefford street, Springfield street westerly.....	Clay	293 350	12" 10" }	\$601 41
orrento avenue, Grenada terrace northerly.....	Clay	367	10"	209 65
pringfield street, extension northerly	Clay	151 418 286 437	18" 15" 12" 10" }	1,348 57
ruceland avenue, Longhill street easterly, relaying.....	Clay	450	10"	410 40
ate street, Water street westerly, re- laying.....	Clay	82	12"	83 01
ebbins street, Union street to State street, relaying.....	Clay	300 293	12" 10" }	596 89
James avenue, State street north- erly, relaying.....	Clay	191 467 123	18" 12" 10" }	906 01
ffolk street, Wilbraham road southerly.....	Clay	300	15"	294 06
mner avenue, extension easterly..	Clay	207	8"	60 42
alter street, flush gate and manhole	....	....	....	55 72
estminster street, two manholes..	....	....	....	94 08
hite street, extension southerly...	Clay	207	8"	84 45
olcott street, extension northerly..	Clay	104	10"	119 58
orcester street, I. O., extension easterly.....	Clay	349	15"	435 88
orcester street, I. O., flush gate...	....	....	....	23 86
		26,740		\$47,504 52

NOTE.—The costs of the above described sewers include the costs of manholes and flush gates.

**SEWERS ABANDONED—1907.**

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Armory street, Carew street northerly	Clay	283	8"	\$107 71
Bowdoin street, Worthington street southerly.....	Cem.	18	15"	14 17
Congress street, Garden brook to Main street.....	Cem.	151	15"	432 98
Congress street, Garden brook to Main street.....	Cem.	168	12"	
Longhill street, Cherryvale to Spruce- land avenue.....	Clay	327	10"	291 03
Magnolia terrace, Sumner avenue to Spruceland avenue, east side.	Clay	676	8"	.....
Magnolia terrace, Sumner avenue to Spruceland avenue, west side.	Clay	622	8 "	.....
Oak street, Union to State street...	Cem.	717	18"	880 48
Springfield street, Atwater terrace, northerly.....	Clay	236	8"	.....
Spruceland avenue, Longhill street easterly .....	Clay	442	8"	58 69
State street, Water street westerly..	Cem.	82	12"	.....
Stebbins street, Union street north- erly.....	Cem.	506	12"	467 11
	Clay	67	10"	37 29
St. James avenue, Bay street to Rip- ley avenue.....	Cem.	590	12"	430 63
		4,880		\$2,740 09

**SUMMARY.**

DESCRIPTION.	Length in Feet.	Cost.
Brick and concrete sewers built by regular appropriation	2,050	\$9,924 75
Concrete sewers built by special appropriation .....	2,962	12,074 10
Clay pipe sewers built by regular appropriation .....	19,838	22,708 92
Clay pipe sewers built by special appropriation .....	1,890	2,365 23
Flush gates and manholes built by regular appropriation.....		431 52
	26,740	\$47,504 52
Sewers abandoned.....	4,880	2,740 09
	21,860	\$44,764 43
Changes in lengths not previously reported, net addition	472	
Net addition to sewer system described December 10, 1906 .....	22,332	\$44,764 43

**SEWER CLEANING AND REPAIRS.**

	COST OF	
	Cleaning.	Repairs.
Abbe avenue, . . . . .		\$ 1 63
Andrew street, . . . . .	\$22 88	13 19
Birnie avenue, . . . . .		19 38
Bowdoin street, . . . . .	44 56	
Chester street, . . . . .	10 83	
Clantoy street, . . . . .	20 92	
Clinton street, submerged outlet, . . . . .	4 20	
Congress street, . . . . .	46 84	
Dickinson street, . . . . .	10 85	
Donald street, . . . . .	28 85	8 36
Elm street, submerged outlet, . . . . .	15 88	
Ferry street, . . . . .	17 25	4 43
Florida street, . . . . .	12 10	
Forest street, . . . . .	14 62	
Garden Brook, . . . . .	459 17	8 48
Granville street, . . . . .	16 47	
Liberty street, . . . . .	14 10	
Lowell street, . . . . .	67 81	
Main street, . . . . .	414 84	7 35
Main street, I. O., . . . . .	9 00	
Market street, . . . . .		20 50
Massasoit street, . . . . .	1 31	4 52
Montmorenci street, . . . . .		34 32
North Main street, brook at Donald street, . . . . .		12 67
Oak street, I. O., . . . . .	9 75	8 96
Prince street, . . . . .	12 25	
Queen street, . . . . .		17 39
Sanford street, . . . . .	21 37	
Seventh street, . . . . .		10 35
Sewer connections, . . . . .		93 85
Sumner avenue, . . . . .	3 44	
Sundry sewers, costing less than \$10.00, . . . . .	30 42	186 68
Taylor street, . . . . .		41 63
Union street, . . . . .	46 18	11 54
Water street, . . . . .	4 88	45 50

SEWER CLEANING AND REPAIRS.—CONTINUED.

	COST OF	
	Cleaning.	Repairs.
Westminster street, . . . . .	\$38 30	
Walter street, . . . . .		\$34 59
Whitney avenue, . . . . .		10 26
Worthington street, . . . . .		36 01
Worthington street, submerged outlet, . . . . .	18 19	
	<hr/> \$1,415 71	<hr/> \$631 69

GENERAL DESCRIPTIONS.

Sewer construction amounting to 21,728 feet of pipe and 5,012 feet of concrete has been built during the year.

This has been done directly by this department and is greatly in excess of that of previous years.

The increase was made possible by special order of the Board of Aldermen, providing for an issue of bonds amounting to \$20,000.00 for building concrete sewers in Pecousic avenue, Main and Carew streets and pipe sewers in Longhill and Armory streets.

CONCRETE SEWERS.

With the exception of the Belmont avenue sewer, where a brick arch was laid above a concrete invert, all trunk sewers have been built of concrete.

This is the first year that sewers have been built of this material in this city, although elsewhere, in recent years, concrete has been used quite extensively.

It was found that its use resulted in a saving of about four dollars per cubic yard when compared with the cost of brick heretofore used. The total saving probably amounted to about



**SEWER ENTRANCES.**

The receipts from sewer entrance fees, which are credited to the Sewers and Drains account, amounted to about \$14,000.00, which is some \$7,000.00 more than was received last year.

By order of the City Council the applications for sewer entrances previously made at the office of the City Treasurer, are now made in this office.

**DEFECTIVE SEWERS.**

Recommendations previously made as to the necessity for rebuilding the State street sewer easterly of the City Library, and the Union street sewer easterly of Main street, are renewed.

**SURCHARGED SEWERS.**

No changes have been made for the relief of the Fort Pleasant avenue sewer, which does not provide for heavy rains, and which was referred to last year. For the relief of the Belmont avenue sewer, however, also mentioned last year, sewers have been built in Hall and Keith streets, to divert surface water in these two streets from the Belmont avenue system to the Dickinson street sewer.

**CONCLUSION.**

It gives me pleasure to acknowledge the co-operation of Mr. Howard O. Buck, Assistant Superintendent of Streets and Sewers, and to thank the various foremen and men through whose efforts the success attained by this department during the year is largely measured.

The uniform courtesies extended by Aldermen Willis A. Ford, Henry N. Bowman and Fred R. Brown, members of the

Committee on Sewers and Drains, are acknowledged and I thank them for their co-operation.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

---

BOARD OF ALDERMEN, December 30, 1907.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

---

COMMON COUNCIL, December 30, 1907.

Read and concurred.

H. S. GILBERT, *Clerk.*

---

Presented to the Mayor for approval, December 31, 1907.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1907.

Approved.

W. E. SANDERSON, *Mayor.*

# CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO NOVEMBER 30, 1907.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly	301	15"	Clay	\$497.38
	275	12"	Clay	
Plainfield st., westerly.....	300	18"	Clay	1,405.16
	300	15"	Clay	
	301	12"	Clay	
	200	10"	Clay	
Acushnet ave., Main street, easterly .....	294	20"	Clay	298.94
	279	18"	Clay	
	271	15"	Clay	
	26	12"	Clay	
Adams st., Main st. to Town brook .....	64	18"	Cem.	322.22
	86	18"	Clay	
Town brook, easterly.....	890	....	Brick	66.68
Richelien st., westerly.....	237	12"	Clay	304.12
Alden st., Hancock to East- ern ave .....	595	18"	Cem.	1,646.13
	820	15"	Cem.	
Eastern ave., to Wilbraham ave.....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	Clay	250.86
Alderman st., Dickinson st., easterly .....	296	18"	Clay	916.78
	304	15"	Clay	
	300	12"	Clay	
	137	10"	Clay	
Alexander st., North street, easterly .....	288	10"	Clay	188.48
Alfred st., Birnie ave., easterly	377	10"	Clay	.....
Allen ave., Allen st., easterly	338	10"	Clay	232.73
Allen st., Mill river to Oak- land st. ....	216	24"	Clay	576.86
Mill st. to Oakland st.....	365	10"	Clay	447.19
Oakland st. to Plumtree rd..	686	24"	Clay	1,832.06
	383	18"	Clay	1,598.59
	474	15"	Clay	
	580	12"	Clay	
	1,603	12"	Clay	
	1,401	10"	Clay	984.62
Allendale st., North st., east- erly .....	272	12"	Clay	6,320.90
	340	10"	Clay	401.48

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Amaron st., State st., south- erly .....	349	10"	Clay	\$222.90
Amherst st., Harvard street, northerly .....	441	12"	Cem.	\$146.99
	25	10"	Clay	23.78
Princeton to Monmouth st..	512	12"	Clay	622.90
	191	10"	Clay	
				793.67
Andrew st., State st., north- erly .....	463	20"	Clay	
	422	18"	Clay	1,753.67
	382	12"	Clay	
Arbor st., Butler to Carew st.	398	12"	Clay	318.05
Arch st. (see Garden brook)				
Armory Hill Sewer (see pri- vate ways).				
Armory st., Worthington st., southerly .....	570	15"	Cem.	658.06
Summer st., southerly .....	374	12"	Clay	384.78
	325	10"	Clay	193.87
B. & A R. R. to Liberty st.	690	15"	Clay	
	360	12"	Clay	1,165.47
	271	10"	Clay	
Liberty to Sullivan st. ....	450	1'-10 1/2" x 2'-9"	Brick	2,439.42
	476	1'-8 1/2" x 2'-6"	Brick	
Sullivan to Carew st. ....	156	24"	Clay	
	267	20"	Clay	975.77
	290	12"	Clay	
Carew st., northerly .....	452	20"	Clay	1,066.91
	803	10"	Clay	
Springfield st., southerly...	31	20"	Clay	317.00
	146	18"	Clay	
				7,201.28
Ashley st., Cedar st., easterly	65	18"	Cem.	80.45
	580	15"	Cem.	1,555.00
	697	12"	Cem.	
				1,635.45
Atwater Terrace road, Green lane, westerly .....	322	20"	Clay	
	199	18"	Clay	
Auburn st., Fulton st., easterly	397	12"	Clay	
	335	10"	Clay	655.06
Autumn st., Summer to Wor- thington st. ....	239	15"	Clay	715.29
Avon place, Maple st., east- erly .....	695	24"	Clay	3,359.45
Bancroft st., Garden brook to Chestnut st. ....	1,361	3'-4" x 5'-0"	Brick	
including Chestnut st., Ban- croft to Montmorenci st..	379	3'-2" x 4'-9"	Brick	8,914.04
Montmorenci st., Chestnut st., easterly .....	43	3'-2" x 4'-9"	Brick	

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bay st., St. James avenue to Pleasant st.....	250	15"	Clay	
	245	12"	Clay	
	228	10"	Clay	\$735.01
Florida to Pleasant st.....	235	12"	Clay	321.02
Florida to Sherman st.....	304	20"	Clay	
	377	18"	Clay	1,092.89
	812	15"	Clay	945.16
Sherman to Clarendon st....	151	8"	Cem.	46.82
Catharine to Clarendon st....	194	10"	Clay	200.66
Bowles to Cambridge st.....	1,037	2'-8" x 4'-0"	Brick	
	360	2'-2" x 3'-3"	Brick	8,056.62
Cambridge st., easterly....	247	8"	Clay	61.87
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	119.21
Colton st., easterly.....	124	8"	Clay	3.65
				122.86
Beaudry st., I. O., Main st., southerly.....	300	12"	Clay	
	270	10"	Clay	745.95
Beaumont st., Belmont ave., northerly.....	250	12"	Clay	
	431	10"	Clay	403.87
Belmont ave. to Sumner ave.,.....	264	10"	Clay	161.92
				565.79
Beech st., Central st., north- erly.....	410	10"	Cem.	95.88
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut st., westerly.....	220	8"	Clay	
	140	6"	Clay	....
Bellevue ave., Belmont ave., easterly.....	300	18"	Clay	
	300	15"	Clay	....
	194	12"	Clay	....
Dickinson st., westerly....	744	10"	Clay	....
Belmont ave., Fort Pleasant ave. easterly.....	90	10"	Clay	93.92
Mill river to Woodside ter..	954	20"	Clay	2,698.67
Woodside ter. to Litchfield st.	660	2'-0" x 3'-0"	Brick	
	445	1'-10" x 2'-9"	Brick	
	595	1'-8" x 2'-6"	Brick	11,750.19
	550	1'-6" x 2'-3"	Brick	
Litchfield street to Kenwood Park.....	432	20"	Clay	
	493	18"	Clay	1,451.53
Kenwood Park to Sumner ave	301	15"	Clay	
	493	12"	Clay	871.69
	616	10"	Clay	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
*Sumner ave. to Wood- lawn st .....	830	3'-4"x5'-0"	Brick }	\$8,216.97
	819	3'-0"x4'-6"	Brick }	
	245	3'-0"x4'-6"	Brick-	3,470.41
	416	2'-10"x4'-3"	Con. }	
				\$28,553.38
Belmont court, Belmont ave., southerly .....	216	10"	Clay	146.76
Benton st., State st., southerly	301	12"	Clay	513.96
	300	10"	Clay	
	247	8"	Clay	
	320	8"	Clay	
Berendo ave., Grenada ter. to Alderman st. ....	345	12"	Clay	419.68
				933.64
Berkeley st. Princeton to Monmouth st. ....	483	12"	Clay	282.67
Berkshire st., I. O., .....				517.22
Oak to Myrtle st. ....	701	12"	Cem.	946.21
Oak st., easterly .....	387	12"	Clay	389.89
Chestnut st. to Myrtle st ...	577	12"	Clay	545.74
				1,881.84
Besse place, Main st., west- erly .....	290	10"	Clay	....
Birnie avenue, Wason ave- nue, northerly .....	362	24"	Clay	579.11
Wason ave., southerly .....	350	18"	Clay	1,024.75
	417	15"	Clay	
Worcester street extension, northerly to Grace st. ....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st. ....	144	12"	Cem.	....
Douglas st., northerly .....	292	24"	Clay	1,149.93
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker st. ....	373	1'-10"x2'-9"	Brick	1,319.73
	312	20"	Clay	768.74
	316	18"	Clay	
	168	15"	Clay	158.56
Arch to Hooker st. ....	1,048	24"	Clay	....
Bliss st., from Main to N. Y., N. H. & H. R. R. ....	1,284	12"	Cem.	5,000.82
Bloomfield st., Oakland st., easterly .....	500	18"	Clay	1,190.68
	361	15"	Clay	1,287.86
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) .....	203	12"	Cem.	....

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bond st., Garden Brook sewer to Chestnut st.....	341	2'-0" x 3'-0"	Brick	\$1,580.25
	959	24"	Clay	2,195.84
				\$3,776.09
Bowdoin st., Worthington st., southerly .....	660	15"	Cem.	762.11
	285	12"	Clay	371.52
Worthington to Ingersoll gr..	819	12"	Cem.	758.64
				1,892.27
Bowles st., Bay to McKnight	752	15"	Cem.	1,058.67
Pease st., northerly....	275	8"	Clay	35.77
				1,094.44
Boylston st., Cypress to Clin- ton street.....	610	18"	Cem. }	1,638.72
	346	15"	Cem. }	
Brace st., Belmont avenue, northerly .....	137	10"	Clay	....
Bradford st., North Main to Fulton st.....	352	15"	Cem. }	1,301.99
	758	12"	Cem. }	
Bridge st., Main st. to Conn. river .....	798	12"	Cem.	718.79
	275	15"	Clay	429.14
Main to Chestnut st.....	1,158	2'-0" x 3'-0"	Brick	5,414.20
				6,562.13
Broad st., Hanover to Main st	970	15"	Cem.	1,401.19
Brookline avenue, North st., easterly .....	328	12"	Clay }	29.37
	171	10"	Clay }	
Brown st., Yale to Bay st....	483	10"	Cem. }	357.65
	21	8"	Cem. }	
Buckingham place, Bay st., westerly .....	235	10"	Clay	168.97
Buckingham st., Bay to Clar- endon st.....	651	12"	Clay }	597.24
	35	12"	Cem. }	
Bay st., southerly .....	305	18"	Clay }	1,158.40
State to Bay st.....	345	15"	Clay }	
	675	12"	Clay }	1,755.64
Burr st., Andrew st., easterly.	570	12"	Clay	426.83
Butler st., Chestnut to Cass st	1,268	20"	Clay	2,021.96
Cass st., easterly.....	321	20"	Clay	520.71
				2,542.67
Calhoun st., North Main to North st.....	853	12"	Clay	631.40
North st., easterly.....	300	8"	Clay	227.19
				858.59

## SEWER CONSTRUCTION.—CONTINUED.

SEWER.	Length in Feet.	Size.	Material.	Cost.
et, Bay street				
.....	276	20"	Clay	\$1,100 88
	331	18"	Clay	
	266	15"	Clay	
	302	12"	Clay	
	278	10"	Clay	411.63
pond (see pri-				\$1,512.51
ain st. to Gar-				
cost shown un-				
st.) .....	250	4'-6"x6'-9"	Brick	....
	32	5'-0" Cir.	Brick	....
to Prospect st.	1,456	4'-3" cir.	Brick	21,913.22
	1,257	3'-0" cir.	Brick	
	791	2'-8" cir.	Brick	
et, easterly...	580	18"	Cem.	671.51
	200	12"	Cem.	153.28
o Armory.....	989	2'-8" cir.	Con.	8,487.12
	1,365	2'-6"x3'-9"	Con.	
Sherman road	502	15"	Clay	2,289.14
	499	12"	Clay	
	1,535	10"	Clay	
	448	8"	Clay	
				33,514.27
to Franklin st.	500	12"	Clay	457.99
	163	10"	Clay	
urtherly.....	596	15"	Clay	892.07
rtherly.....	224	12"	Clay	
				1,350.06
Dartmouth to				
t .....	833	2'-0"x3'-0"	Brick	4,428.92
McKnight st..	348	15"	Clay	1,348.95
	438	12"	Clay	
	333	10"	Clay	
				5,777.87
to Walnut st.	180	3'-10"x5'-9"	Brick	889.35
	1,074	3'-8"x5'-6"	Brick	6,206.73
erly .....	378	12"	Cem.	288.32
				7,384.40
l., Main st. to				
.....	433	2'-0"x3'-0"	Brick	2,001.44
inter st.....	274	12"	Clay	198.76
sk (see private				2,200.20
Oak to Pine st	463	12"	Cem.	510.73
st .....	349	12"	Clay	668.19
	300	10"	Clay	
				1,178.92



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Central st., Main st., easterly	99	15"	Cem.	\$147.60
	546	12"	Cem.	385.49
Main to near Maple st. ....	527	2'-0"x3'-0"	Brick }	2,275.08
	700	1'-8"x2'-6"	Brick }	
near Maple street to Sterns terrace .....	769	18"	Clay	1,211.88
	105	12"	Clay	199.95
Sterns terrace to Cedar st. ....	334	18"	Cem.	102.50
Pine st., westerly .....	500	12"	Cem.	568.42
Pine to Spruce st. ....	339	12"	Cem.	376.00
	335	12"	Clay	514.05
	310	10"	Clay	
Spruce to Hancock st. ....	861	20"	Clay	1,344.35
Hancock st. to Mill st. ....	597	2'-0"x3'-0"	Brick	2,135.31
Mill st. to Mill river. ....	40	24"	Clay	136.83
Central st. place, Knox to Central st. ....	279	10"	Cem.	197.64
	285	12"	Cem.	44.07
Chapel street, Eastern ave- nue, easterly .....	400	10"	Clay	
Chapin terrace, Chestnut st., easterly .....	327	15"	Clay }	1
	279	12"	Clay }	
Chase ave. Fort Pleasant ave., easterly .....	238	12"	Clay }	
	333	10"	Clay }	
Charles st., Liberty to Frank- lin .....	27	12"	Clay }	576.40
	620	12"	Cem. }	
Liberty st., southerly .....	29	12"	Clay	12.94
Charter ave., Walnut street, easterly .....	527	12"	Clay	
Cherrellyn ave., Phoenix ave., southerly .....	300	15"	Clay	
Cherry lane, Mill river to Cen- tral street .....	398	18"	Clay }	
	434	15"	Clay }	
	251	12"	Clay }	
	295	10"	Clay }	
Cherryvale ave., Longhill st. to Florentine gardens.	596	10"	Clay	
Chester st., Hancock to Cen- tral street .....	330	8"	Clay	
Chestnut st., Edwards street, southerly .....	575	12"	Cem.	579.02
Mattoon st., southerly .....	288	15"	Cem.	319.69
Pearl to Mattoon st. ....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st. ....	143	1'-8"x2'-6"	Brick	599.51

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
ge to Worthington st..	480	2'-0" cir.	Brick	....
hington to Taylor st...	60	18"	Cem. }	\$291.17
	244	12"	Cem. }	
in st. to B. & A. R. R..	134	18"	Cem. }	355.41
	72	12"	Cem. }	
clin st., southerly.....	500	12"	Cem.	358.75
clin st., northerly.....	397	12"	Cem.	294.14
to Everett st.....	374	15"	Cem.	586.72
w st., southerly .....	126	8"	Clay	100.68
w to Prospect st.....	424	24"	Clay }	1,618.64
	537	20"	Clay }	
ect st., northerly.....	220	12"	Cem.	178.88
roft st., southerly.....	172	12"	Cem.	123.00
	108	12"	Clay }	190.55
	19	10"	Clay }	
roft to Montmorenci st	391	15"	Cem.	535.24
roft st. to Montmorenci (see Bancroft st.).....	....	3'-2"x4'-9"	Brick	....
morenci to Waverly st.	185	12"	Cem.	252.23
	717	12"	Clay	807.01
las st., southerly.....	450	10"	Clay	385.61
las to Springfield (see ringfield st.).....	....	3'-6" cir.	Brick	....
rin st., southerly ....	178	10"	Clay	....
e st., northerly.....	87	15"	Clay	....
e st., southerly.....	171	10"	Clay	....
				\$8,021.65
ut st. I. O., Worcester				
Hampden st. ....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
pden to Berkshire st...	307	15"	Clay	342.65
1 st., Garden brook to				738.16
orth st .....	556	18"	Clay	1,398.71
	80	15"	Cem.	157.23
ill st., Sumner ave. to				1,555.94
rfield st .....	580	12"	Clay	84.12
	55	8"	Clay	6.89
				91.01
y st., Phoenix avenue, therly.....	398	15"	Clay }	696.54
	253	12"	Clay }	
don st., Worthington				
, westerly.....	205	10"	Clay	225.80
hington to St. James ave.	336	18"	Cem. }	1,859.31
imes ave. to Sherman st.	280	15"	Clay }	
	605	12"	Clay }	2,085.11
st., Hancock st., west-				
y .....	520	10"	Clay	531.80

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cleveland street, Armory to Liberty st.....	274	18"	Clay	\$79
	250	15"	Clay	
	276	12"	Clay	
	284	10"	Clay	
Clifford st., Bay st., northerly	250	12"	Clay	31
	119	10"	Clay	
Clifton avenue, Central street, southerly	406	8"	Clay	8
Cliftwood ave., Sumner ave., southerly	464	10"	Clay	..
Clinton st., Boylston st., easterly	410	12"	Cem.	\$441.52
submerged outlet	176	24"	Wood	
	24	24"	C. Ir'n	
	593	4'-10" x 7'-3"		
Conn. river to Fulton st....				2 207.90
Fulton st., Clinton to Sar- geant street.....				
Sargeant st., Fulton to Main street			Brick	
Carew st., Main st. to Garden brook				
(For lengths and sizes see individual streets.)				26,137.87
				28,786
College ave. State st. to Shat- tuck ave.....	839	12"	Clay	139 62
Shattuck ave., northerly....	175	12"	Clay	37.94
College st. State st. to Wilbra- ham road	34	12"	Clay	17
	443	10"	Clay	34
Collins st., Eastern avenue to Logan st.....	300	12"	Clay	45
	269	10"	Clay	
Colonial avenue, State street, southerly	326	12"	Clay	2
	348	10"	Clay	
Colton st. Wilbraham road to Beacon st.....	448	18"	Clay	1,89
	569	15"	Clay	
	658	12"	Clay	
Columbia terrace Liberty st., north and east	498	10"	Clay	...
Commonwealth ave., Bel- mont ave. to Washington street.....	441	24"	Clay	2,87
	500	20"	Clay	
	549	18"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Congress st. Garden brook to</b>				
Main st.....	53	12"	Cem.	\$75.46
	319	12"	Clay	705.44
Garden brook to Chestnut st.	133	20"	Clay	1,463.00
	198	18"	Clay	
	369	15"	Clay	
	288	12"	Clay	
	119	15"	Cem.	277.22
	76	10"	Cem.	
				<hr/> \$2,521.12
<b>Continental st., Sumner ave.</b>				
southerly.....	215	12"	Clay	52.19
	266	10"	Clay	
<b>Cook's ave., Worthington st.</b>				
to N. Church ave.....	117	15"	Cem.	573.84
N Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	Cem.	
<b>Cornell st., Dartmouth terrace</b>				
to Wellesley st.....	185	15"	Clay	543.05
	374	12"	Clay	
Wellesley street., easterly..	186	10"	Clay	208.20
Princeton st., westerly.....	52	10"	Cem.	47.30
	86	8"	Clay	88.04
Princeton st., easterly.....	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				<hr/> 1,186.84
<b>Cortland street, State street</b>				
northerly .....	164	15"	Clay	672.01
	621	12"	Clay	
<b>Court st., Water st, easterly.</b>	273	12"	Cem.	226.15
Court Square ave., westerly.	431	12"	Cem.	553.45
Main st. to Court Square ave.	200	12"	Cem.	309.67
				<hr/> 1,089.27
<b>Crosby st. Walnut st. westerly</b>	321	10"	Clay	231.38
<b>Cross st., Main to Willow st.</b>	388	18"	Clay	878.12
Willow st, easterly.....	363	12"	Cem.	311.56
				<hr/> 1,189.68
<b>Crystal ave., Belmont ave.,</b>				
easterly .....	251	15"	Clay	24.07
	250	12"	Clay	
	298	10"	Clay	
<b>Cumberland st. Chestnut st.,</b>				
westerly .....	167	10"	Clay	125.29
North Main st., easterly ...	147	15"	Clay	182.77
<b>Cypress st., Conn. river to</b>				308.06
Garden brook in Ferry st.	1,466	3'-4"x5'-0"	Brick	13,629.35
<b>Cypress ave., Cypress street</b>				
northerly.....	360	12"	Cem.	484.08

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dale st., northerly from sewer	203	10"	Clay	\$157.30
60 ft. south of Hubbard ave	46	8"	Clay	13.06
Winthrop st., southerly....				<u>170.38</u>
Dartmouth st. St. James ave.	973	3'-0"x4'-6"	Brick }	....
to Yale st.....	295	2'-6"x3'-9"	Brick }	8,247.06
Yale to Bowles st.....				
Dartmouth ter., Worthing-	499	20"	Clay }	
ton st. to Cornell st.....	357	18"	Clay }	2,213.06
	177	15"	Clay }	
Davis court, Bridge st. to	450	12"	Clay	500.87
Harrison ave.....	229	15"	Clay }	
Dawes st., Bay st., southerly	380	12"	Clay }	165.40
	518	10"	Clay }	
Dawson ave., White street,	350	10"	Clay	95.87
westerly .....				
Daytons st., Belmont ave. to	524	12"	Clay	467.07
Sumner ave.....				
Demand avenue Fisk avenue	510	12"	Clay }	
westerly .....	408	12"	Clay }	608.87
Plainfield st., easterly .....	558	12"	Cem.	60.83
Dexter st , Knox to Pine st..	226	10"	Clay	245.10
Dickinson st. Mill st. to Sum-				<u>305.86</u>
ner ave.....	35	4'-6" cir.	Brick }	
	60	2'-1"x5'-0"	Brick }	
	251	5'-0" cir.	Brick }	
	679	4'-0" cir.	Brick }	44,553.11
	*460	4'-10"x7'-3"	Brick }	
	*869	4'-8"x7'-0"	Brick }	
	*1,040	4'-4"x6'-6"	Brick }	
	*996	4'-2"x6'-3"	Brick }	
Sumner ave., southerly....	1,379	2'-6"x3'-9"	Brick }	
	324	2'-4"x3'-6"	Brick }	8,760.53
	434	2'-0' x3'-0"	Brick }	
	312	1'-10"x2'-9"	Brick }	<u>53,312.64</u>
Donald st., Birnie ave., east-	315	10"	Clay	18.10
erly.....	364	12"	Clay }	359.50
Dorchester st. St. James ave.	238	10"	Clay }	
to Amherst st.....				
Douglas st. B. & M. R. R. to				
North Main st. (see Row-				
land ave.).....	424	4'-6" cir.	Brick }	....
North Main to Chestnut st..	442	4'-0" cir.	Brick }	4,905.19

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dresden avenue, State street, southerly.....	359	12"	Clay	\$25.14
	321	10"	Clay	
*Dwight st., Sanford to State	258	2'-8" x 4'-0"	Brick	\$1,571.86
Sanford to Harrison ave....	253	20"	Clay	1,441 27
	229	18"	Clay	
	199	15"	Clay	
	100	15"	Cem.	
Harrison ave., northerly....	100	15"	Cem.	144.41
Hillman st., southerly.....	226	10"	Clay	257.25
Hillman st., northerly.....	103	10"	Clay	388.28
Worthington st., southerly..	269	12"	Clay	433 91
Worthington st., northerly..	342	12"	Cem.	374.73
				4,611.71
Dymon st. Walnut st., easterly	415	12"	Cem.	385.92
Eagle st., North Main to Chestnut st.....	643	15"	Clay	....
East Court st. Dwight street, westerly .....	206	12"	Clay	303.10
	62	10"	Clay	
East Hooker street, North Main st. to North st.....	444	10"	Cem.	39 04
	255	10"	Clay	....
				39.04
Eastern ave. Watershop pond to Manhattan st .....	1,164	24"	Clay	2,164.43
Manhattan to Alden st.	338	20"	Clay	636.21
Alden to Collins st.....	231	12"	Clay	313.99
Greene st., southerly.....	125	8"	Clay	69.58
Greene to Ladd st.....	38	15"	Clay	27.25
Olive st., southerly .....	169	8"	Clay	119.57
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon st., northerly....	194	12"	Cem.	331.17
King st. to Chapel st.....	152	10"	Cem.	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly...	312	12"	Cem.	190.38
Tyler st., northerly.....	286	12"	Cem.	181.30
Quincy st., northerly.....	118	10"	Cem.	131.15
Monroe st., southerly.....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly .....	29	12"	Cem.	51.50
	128	8"	Clay	90 66
				5,038.44
Edwards st., Chestnut street, easterly .....	551	12"	Cem.	404.88
Elliott st., Salem st. southerly	610	15"	Cem.	730.48
	243	12"	Cem.	309.08
				1,039.56
Elm st., submerged outlet....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Conn. river to Water st. ....	385	3'-9" cir.	Brick	\$10,744.19
Water st. to Main st. ....	996	3'-8"x5'-6"	Brick	
Elmwood st., Main st., west- erly .....	300	18"	Clay	\$12,904.78
	249	15"	Clay	
	50	12"	Clay	
Emery st., Boylston st., east and west .....	542	12"	Cem.	616.36
Essex street, Garden brook, westerly .....	418	15"	Cem.	355.00
Garden brook to Chestnut st.	1,115	2'-2"x3'-8"	Brick	7,105.10
	204	18"	Cem.	355.53
				7,815.43
Essex st. I. O., Oak to Myrtle street .....	254	12"	Clay	662.25
	426	10"	Clay	
	183	10"	Clay	
Oak st., easterly .....				248.23
Euclid ave., Belmont ave. to Dickinson st. ....	389	12"	Clay	1,102.00
	741	10"	Clay	
	77	8"	Clay	
*Dickinson st., westerly....	350	15"	Clay	50.67
	350	12"	Clay	773.10
Dickinson st., easterly .....	275	10"	Clay	307.83
				2,233.60
Everett st., Chestnut st. to brook .....	323	15"	Cem.	308.39
brook to Cass st. ....	926	15"	Clay	821.43
Cass st., easterly .....				104.35
				1,234.17
Fairbanks place, Worthing- ton st., northerly .....	249	10"	Clay	230.66
Fairfield street, Litchfield to Garfield st. ....	376	12"	Clay	....
	556	10"	Clay	351.64
				351.64
Farnsworth st., Hamburg st. northerly .....	530	20"	Clay	1,653.14
Federal st., Worthington to Pearl st. ....	567	12"	Cem.	740.92
Summer st., southerly .....	274	10"	Clay	172.00
				912.92
Ferry st., Main to Garden brook (see Cypress st. ....	....	....	....	....
Garden brook to Chestnut st.	1,168	2'-4"x3'-6"	Brick	5,417.12
Firglade ave., Sumner ave to Spruceland st. ....	350	10"	Clay	5,417.17
	203	8"	Clay	

\* Surface drainage only.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Spruceland to Pineywoods avenue.....	447	10"	Clay	....
	67	8"	Clay	....
				\$46.01
Fisk ave., Rowland to Worces- ter ave. ....	272	24"	Clay	\$1,073.11
	275	20"	Clay	
	298	10"	Clay	
Wason ave., southerly.....	299	24"	Clay	1,216.81
	294	20"	Clay	
	248	12"	Clay	
				2,289.92
Florence st., Pine st., easterly	824	15"	Cem.	2,227.38
	651	12"	Cem.	
Hancock st., easterly. ....	283	10"	Cem.	303.15
				2,530.53
Florentine gardens, Piney- woods ave., northerly.....	421	10"	Clay	22.83
Florida st., Worthington to Ingersoll Grove st.....	273	15"	Cem.	359.06
	561	12"	Cem.	523.88
Worthington to St. James ave	935	2'-2" x 3'-3"	Brick	4,499.10
St. James ave. to Bay st....	599	24"	Clay	1,832.21
				7,214.25
Forest st., Belmont ave. to Forest Park ave.....	419	12"	Clay	651.93
	255	10"	Clay	
Forest Park ave., Fort Pleas- ant ave. to Garfield st....	1,081	24"	Clay	....
	325	20"	Clay	1,217.48
	562	18"	Clay	
Sumner ave., northerly....	567	12"	Clay	123.15
Sumner ave., southerly.....	66	10"	Clay	....
	438	10"	Clay	318.29
Pineywoods ave., northerly.	380	10"	Clay	33.87
				1,692.79
Fort st., Main to Water st..	633	12"	Cem.	633.43
Fort Pleasant ave., Mill river to Sumner ave.....	888	2'-4" x 3'-6"	Brick	13,339.80
	1,825	2'-0" x 3'-0"	Brick	
Mill st., southerly .....	428	12"	Clay	293.42
				13,633.22
Franklin st., Garden brook sewer to Main st....	434	18"	Cem.	593.13
Garden brook sewer to Chest- nut st. ....	469	18"	Cem.	1,834.76
	735	15"	Cem.	
Chestnut to Charles st. ....	273	15"	Clay	303.37
Charles st., easterly.....	670	12"	Clay	471.99
Cass st. to Webster st....	621	12"	Clay	684.32
	70	10"	Clay	



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Nursery st., westerly.....	207	15"	Clay	....
Nursery st. to Genesee st...	107	15"	Clay	\$199.93
	557	15"	Cem.	....
	27	12"	Clay	57.66
				<hr/> \$4,145.16
Fremont st. Main to Water st.	780	1'-6"x1'-7"	Brick	702.45
Main st., westerly.....	656	12"	Cem.	656.59
	30	12"	Clay	65.21
				<hr/> 1,424.25
Fulton st., Cypress to Clinton st.....	944	12"	Cem.	826.66
*Clinton to Sargeant st. (cost shown under Clinton st.)	1,080	4'-8"x7'-0"	Brick	....
	42	4'-10"x7'-3"	Brick	....
Sargeant to John st.....	555	15"	Cem.	1,219.02
John st., northerly.....	314	12"	Clay	674.48
	408	10"	Clay	
Garden brook sewer (see pri- vate ways).				<hr/> 2,720.16
Gardner ave. Gardner street, northerly.....	151	8"	Clay	73.11
Gardner st. Hanover to Water street .....	655	2'-0"x3'-0"	Brick	1,995.23
Water to Main st.....	400	12"	Cem.	518.97
				<hr/> 2,514.30
Garfield st. Forest Park ave., easterly .....	556	15"	Clay	967.16
	514	12"	Clay	
Belmont ave., westerly.....	531	10"	Clay	
				<hr/> 1,297.03
Genesee st., Franklin st.. southerly .....	200	10"	Clay	234.87
George st., Dexter st., south- erly .....	409	10"	Clay	344.52
Girard ave., Bay st. to Mc- Knight st.....	947	12"	Clay	711.13
Gordon st., Pasadena ave. to White st.....	618	15"	Clay	555.79
Grace st. Birnie ave., easterly	274	15"	Cem.	51.56
Grand ave., Revere st., east- erly .....	250	15"	Clay	....
	252	12"	Clay	
Revere st., westerly.....	151	10"	Clay	
				<hr/> ....
Grant st. Magazine to Armory street.....	588	12"	Cem.	439.33
Granville st., Eastern ave. to Logan st.....	495	12"	Cem.	560.46

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet	Size.	Material	Cost.
Gray's ave., Cypress avenue, northerly .....	495	12"	Cem.	\$460.92
Greene st. Hancock to East- ern ave.....	610	18"	Cem. }	1,897.68
	793	15"	Cem. }	
Green lane, Rimmon avenue, westerly and northerly...	744	12"	Clay	.....
	143	10"	Clay	
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	133.66
Greenwich st. Birnie avenue, easterly.....	300	12"	Clay }	467.79
	300	10"	Clay }	
Greenwood st. Garden brook to Main st.....	386	12"	Cem. }	2,231.69
Garden brook, easterly.....	538	15"	Clay	
	113	12"	Clay	
	452	12"	Cem. }	
Grenada terrace, Dickinson st. to Ventura st.....	220	18"	Clay }	\$708.45
	310	15"	Clay }	
Ventura st., easterly.....	309	12"	Clay }	997.28
	216	10"	Clay }	
Grosvenor st., North to Chestnut street.....	131	18"	Cem. }	1,105.73
	648	15"	Cem. }	
Grove st. North Main street, easterly.....	409	10"	Clay }	442.65
North st., westerly.....	270	10"	Clay }	
Grover street, Armory street to Liberty st.....	300	18"	Clay }	910.58
	303	15"	Clay	
	298	12"	Clay	
	432	10"	Clay	
Hall st. Belmont ave. to Dick- inson st.....	500	12"	Clay }	904.55
	474	10"	Clay }	
*Dickinson st., southerly...	774	12"	Clay	698.29
Hamburg st., Springfield st., easterly.....	367	20"	Clay }	1,602.84
	235	10"	Clay }	
Hampden st. Water street to Main st.....	569	15"	Cem.	762.57
Hampden st. I. O., Chestnut st., easterly .....	285	12"	Cem.	187.28
	174	12"	Clay	299.12
Holly st., easterly.....	150	10"	Clay	165.26
				651.66

\*Surface drainage only.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hampshire st. I. O., Oak st., westerly . . . . .	300	12"	Clay }	\$633.59
	398	10"	Clay }	
Oak st., easterly . . . . .	250	12"	Cem.	206.30
Myrtle st., westerly . . . . .	300	10"	Clay	278.62
Hancock street, Mill river to Central st. . . . .	920	12"	Clay	866.80
Central to Walnut st. . . . .	218	18"	Cem. }	1,759.06
	1,343	15"	Cem. }	
Walnut to Alden st. . . . .	122	12"	Cem.	88.00
Lebanon to Alden st. . . . .	827	2'-0" x 3'-0"	Brick	5,009.61
Walnut (through Lebanon) to Quincy st. . . . .	1,852	3'-6" x 5'-3"	Brick }	21,668.02
Quincy to State st. . . . .	913	3'-4" x 5'-0"	Brick }	
Hanover st. York st. to Gard- ner st. . . . .	830	2'-2" x 3'-3"	Brick	29,390.99
Harriet st. North Main st. to North st. . . . .	250	15"	Clay }	377.17
	207	12"	Clay }	
North st., easterly . . . . .	330	10"	Clay	172.92
Harrison ave., Main st. to Chestnut st. . . . .	600	15"	Cem.	874.11
	250	8"	Clay	203.61
Harvard st. Yale to St. James ave . . . . .	316	18"	Clay }	967.94
	300	15"	Clay }	
	291	12"	Cem.	266.84
St. James ave. to Cornell st..	736	12"	Cem.	25.66
Hawley st., Wilbraham road to Monroe st. . . . .	181	12"	Cem.	40.40
	330	10"	Clay	240.17
				280.37
Hawthorn st. Hancock street, westerly . . . . .	441	12"	Cem	445.87
Hayden st. State st., northerly	335	12"	Clay }	
	299	10"	Clay }	
	222	8"	Clay }	24.11
H. bron st. North to Chestnut st. . . . .	663	12"	Clay	492.56
Hickory st., Mill river inter- cepting sewer to Alden st.	754	20"	Clay }	
	228	18"	Clay }	
	184	15"	Clay }	3,446.84
	788	12"	Clay }	
High street, Maple street to Ingraham ave. . . . .	523	18"	Clay }	1,938.92
	567	15"	Clay }	
	550	12"	Clay }	
Ingraham ave., easterly . . . .	846	12"	Clay	945.32
				2,904.24

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hillman st., Main to Dwight st. ....	350 380	15" 12"	Clay } Clay }	\$1,436.30
Hillside place, Richelieu court, easterly.....	106	8"	Clay	
Holly st. I. O., Worcester to Hampden st.....	377	15"	Clay	419.11
Holyoke st., Main st., west- erly .....	734	12"	Cem.	928.06
Homer st., State st. southerly	31 370	12" 10"	Clay } Clay }	87.00
Horace st., Dickinson st., northerly.....	363 411	12" 10"	Clay } Clay }	783.12
Howard st. Main st., westerly	344 321	15" 12"	Clay } Clay }	
Water st, easterly.....	312	12"	Cem.	\$799.34 289.14
Water st, westerly.....	350	12"	Cem.	364.47
				1,452.95
Hubbard ave., Main street easterly... ..	257 321	15" 12"	Clay } Clay }	630.47
Hunt terrace, Allen street, northerly .....	304	10"	Clay	
Huntington st., Birnie ave., easterly .. ..	300 300	12" 10"	Clay } Clay }	416.95
Ingersoll grove, Worthington st., northerly.....	782 218	12" 8"	Cem. } Clay }	
Bowdoin st., easterly. ....	132	10"	Clay	1,038.85 106.53
Irrington ave., Sumner ave.. southerly .....	300 100	12" 10"	Clay } Clay }	1,145.38 ....
Jackson street, Sumner ave., southerly.....	460 140	10" 8"	Clay } Clay }	56.78
Pineywoods ave., northerly.	281	10"	Clay	
James st., Cedar st. northerly	289 534	15" 12"	Cem. } Cem. }	924.38
Jefferson ave. North Main st. to Chestnut st.....	299 299	20" 18"	Clay } Clay }	
See private ways also.	276 60	15" 12"	Clay } Clay }	1,663.86
	414 78	12" 6"	Cem. } Clay }	
				492.50 37.89
				2,194.25

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
John st. Fulton to Plainfield st.	652	12"	Cem.	\$490.18
Johnson st., Dickinson st. to Pasadena ave.....	1,964	18"	Clay	3,756.87
Keith st. Belmont ave. to Dickinson st.....	551	12"	Clay	\$1,106.40
Dickinson st.....	551	10"	Clay	
† Dickinson st., southerly..	350	15"	Clay	823.06
	301	12"	Clay	
	186	10"	Clay	
Kensington ave. Oakland st. easterly.....	320	18"	Clay	1,929.46
Kenwood Park, Belmont ave. northerly.....	130	12"	Clay	493.43
Kenwood terrace Belmont ave to Sumner ave....	1,127	10"	Clay	139.96
	218	12"	Clay	276.31
	197	10"	Clay	
Kibbe ave., Sumner st. to Worthington st.....	260	18"	Clay	552.99
King st., Walnut to Hancock st.....	504	15"	Cem.	921.37
	441	12"	Cem.	
Hancock to Eastern avenue	710	18"	Cem.	1,808.75
	686	15"	Cem.	
Eastern ave. to Logan st....	405	12"	Cem.	96.24
	72	10"	Clay	
* Westford ave. to Wilbra- ham ave.....	427	10"	Clay	321.81
Knox st., Mill river to Wind- sor st.....	1,115	15"	Cem.	3,148.17
	198	12"	Cem.	116.18
	243	15"	Clay	
Ladd st., Eastern ave. to Lo- gan st.....	304	12"	Clay	424.33
Lafayette st., St. James ave. to Amherst st.....	582	12"	Clay	514.96
	21	10"	Clay	
Laurel ave., Conn. river to Plainfield st.....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
Laverne ave. Bellevue to Ma- rengo ave.....	211	10"	Clay	2,370.58
Lebanon st. (see Hancock)	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly.....	158	2'-0" x 3'-0"	Brick	1,495.77
Hancock to Eastern ave ...	606	18"	Cem.	1,701.28
	816	15"	Cem.	
Lenox st., Sumner avenue, southerly.....	465	10"	Clay	3,197.06
Lexington ave. Chestnut st. to Massasoit st.....	668	12"	Clay	32.91
Leyfred terrace, Belmont ave., northerly.....	300	18"	Clay	516.51
	317	15"	Clay	957.90

Surface drainage only.

\*Sanitary sewer.

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Liberty st., Garden brook to Main st .....	118	12"	Clay	\$179.19
	70	1'-6"x1'-7"	Brick	
	172	12"	Cem.	
Garden brook to Chestnut st.	967	15"	Cem.	1,036.34
	171	8"	Cem.	
Chestnut to Webster st. ....	784	2'-4"x3'-6"	Brick	
	659	1'-10"x2'-9"	Brick	9,123.49
	684	2'-2"x3'-3"	Brick	
Webster to Armory st. ....	366	3'-0"x4'-6"	Brick	
	1,282	2'-2"x3'-3"	Brick	5,383.15
	317	1'-10"x2'-9"	Brick	
	449	2'-2"x3'-3"	Brick	2,539.81
Armory to Wentworth ave..	1,194	24"	Clay	
	1,103	18"	Clay	5,227.99
	714	15"	Clay	
				—————\$23,489.97
Lillian st. Oak st., easterly..	297	12"	Clay	232.47
Lincoln st. Magazine street to Federal st. ....	823	12"	Clay	676.54
Linden st. Chestnut to Cass st	470	18"	Cem. }	
	862	15"	Cem. }	1,254.55
Litchfield st. Belmont ave. to Fairfield st. ....	159	15"	Clay	335.11
Garfield st., northerly. ....	69	6"	Clay	7.10
				—————342.21
Locust st., York to Mill st.	84	3'-0"x4'-6"	Brick	
	364	2'-9"x4'-11"	Brick	
	686	2'-6"x3'-9"	Brick	6,804.18
Logan st., Ladd st., northerly	88	10"	Clay	67.64
Granville st., northerly. ....	200	10"	Clay	147.48
Collins st., southerly. ....	97	10"	Clay	109.36
				—————324.48
Lombard st., Water st., east- erly .....	500	12"	Cem.	344.69
Longhill st., submerged out- let. ....	26	18"	Clay	
	290	18"	Wood	
	28	18"	C. I. }	5,387.70
Conn. river to Washington avenue. ....	1,310	24"	Clay	2,086.09
(See Washington avenue.)	346	2'-4"x3'-6"	Brick	1,936.97
Washington ave., northerly..	399	15"	Clay	
	512	12"	Clay	1,027.66
	160	10"	Clay	
Sumner ave., southerly. ....	356	8"	Clay	386.61
Warner pl. to Sumner ave..	423	10"	Clay	379.51

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Main st., southerly.....	136	24"	Clay	\$1,298.32
	265	18"	Clay	
	234	15"	Clay	
	90	2'-0" x 3'-0"	Concr	
				447.63
				<u>\$12,950.49</u>
Loring st. Water st., easterly	650	12"	Cem.	750.96
Lowell street, Conn. river to Plainfield st.....	305	18"	Clay	986.91
	396	15"	Clay	
	396	12"	Clay	
	283	10"	Clay	
Lyman st., Main to Chestnut st.....	1,335	2'-0" x 3'-0"	Brick	6,113.12
Chestnut to Spring st.....	720	15"	Cem.	1,655.26
				<u>7,768.38</u>
Lyons st., I.O., Main street, northerly.....	261	18"	Clay	389.56
Madison ave. Central street, northerly.....	250	12"	Clay	737.57
	287	10"	Clay	
Magazine st., Worthington to Lincoln st.....	682	18"	Cem.	1,103.19
	249	15"	Cem.	
Magnolia ter. east side, Sum- ner ave. to Spruceland ave.	620	10"	Clay	1,233.46
west side, Sumner ave. to Spruceland ave.....	621	10"	Clay	
overflow connection between east and west side.....	62	8"	Clay	26.00
Washington ave. to Spruce- land ave.....	362	24"	Clay	21.08
	602	12"	Clay	
				<u>1,280.54</u>
Main st. Pecousic avenue to Longhill st.....	191	2'-4" x 3'-6"	Concr	1,077.51
Mill river to Mill st.....	258	10"	Clay	342.25
Locust st., southerly.....	800	15"	Cem.	1,430.27
York to B. & A. R.R.....	56	7'-0" cir.	Brick	20,812.99
	1,772	6'-6" cir.	Brick	
	906	5'-6" cir.	Brick	
	990	5'-0" cir.	Brick	
	1,624	3'-4" x 5'-0"	Brick	34,453.56
	864	2'-4" x 3'-6"	Brick	
	263	12"	Clay	164.83
Cypress to Emery st.....	298	15"	Clay	1,210.56
	270	12"	Clay	
Emery st., southerly.....	278	12"	Cem.	389.20

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Emery st. to Sargeant . . . .	341	24"	Clay	\$2,539.81
	442	20"	Clay	
	480	18"	Clay	
	186	15"	Clay	
				\$62,420.97
Main st. I. O., Chicopee river to Pine st . . . . .	2,321	2'-4" x 3'-6"	Brick	7,636.81
Pine to Cedar st . . . . .	500	18"	Cem. }	870.78
	185	15"	Cem. }	
	103	12"	Clay	128.49
Cedar to Lyons st . . . . .	1,110	2'-0" x 3'-0"	Brick	5,024.19
Chicopee river through pri- vate land and Main st. to Beaudry st . . . . .	285	18"	Clay	1,055.75
	232	15"	Clay	
	212	10"	Clay	
	260	12"	Clay	
Parker street, westerly . . . .	205	24"	Clay	254.89
Lyons st., easterly . . . . .	245	18"	Clay	1,334.58
	129	12"	Clay	
	542	15"	Clay	
	291	12"	Clay	
Malden st. Allen st., southerly	494	10"	Clay	16,305.49
				25.75
Manhattan st. Eastern ave. to Walnut st . . . . .	290	15"	Clay	862.70
	645	12"	Clay	
	205	10"	Clay	
	315	18"	Clay	
Maple st., State to Temple st.				675.51
				51.55
Park to High st . . . . .	225	18"	Clay	505.21
Union st., southerly . . . . .	515	18"	Cem. }	959.13
	135	12"	Cem. }	
Central st., southerly . . . . .	33	18"	Cem. }	160.95
	388	12"	Cem. }	
	784	12"	Clay	1,289.58
Pine st., northerly . . . . .	195	15"	Cem. }	1,093.44
	522	12"	Cem. }	
				4,735.37
Mapledell street State street northerly . . . . .	337	15"	Clay	70.80
	300	12"	Clay	
	346	10"	Clay	
Maplewood ter. Fort Pleasant ave., easterly . . . . .	682	15"	Clay	22.21
	329	12"	Clay	
	178	10"	Clay	
Marble st., Main st., easterly	222	18"	Cem. }	1,178.97
	586	15"	Cem. }	
	242	12"	Cem. }	



## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Marengo Park Belmont ave. easterly .....	443 612 778	15" 12" 10"	Clay Clay Clay }	\$95.25
Margaret st., Water st., west- erly .....	520	12"	Cem.	
Water st., easterly .....	858	12"	Cem.	
Marion st., Bay st., southerly	833	12"	Clay	\$507.30
Chapin st., easterly .....	94 319	10" 8"	Clay Clay }	801.44
				1,308.74
Market st. State st. northerly	119	10"	Clay	795.45
Sanford st., southerly .....	200	12"	Clay	25.89
Sanford street to Harrison ave. ....	301 350	15" 12"	Clay Clay }	
Harrison ave., southerly ..	154	12"	Cem.	
				821.34
Mason st., State to Pease st.	349 359	15" 12"	Clay Clay }	1,009.76
Massachusetts ave., Wilbra- ham road, southerly .....	300 300 227	15" 12" 10"	Clay Clay Clay }	
Massasoit place Massasoit st easterly .....	381	12"	Clay	412.04
Massasoit st., Carew street, northerly .....	709	12"	Cem.	1,197.72
Lexington ave., southerly ..	300 250	12" 10"	Clay Clay }	
Montmorenci st., southerly ..	233	10"	Clay	
Montmorenci st., northerly.	152	10"	Clay	92.94
				1,100.12
Mattoon street, Chestnut to Salem st. ....	356 87	1' 4" x 2' 0" 15"	Brick Cem. }	688.50
Maynard st., State st. to Shattuck ave. ....	431 400	15" 12"	Clay Clay }	
McKnight st., Catharine to Sherman st. ....	255 30	15" 15"	Cem. Clay	421.42
Catharine to Bowles st. ....	141 26	10" 10"	Cem. Clay	56.78
Bowles street to Girard ave.	119 263	12" 10"	Cem. Clay	67.27
				75.23
				81.85
				233.51
				926.15

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Mechanic st., Water street, westerly.....	302	12"	Cem.	\$205.25
	20	8"	Clay	40.30
				\$245.55
Medford st., Birnie avenue, easterly.....	390	12"	Clay	367.29
	183	10"	Clay	
Melrose st.,—Marshall place and Cottage ave.....	429	18"	Clay	....
	263	15"	Clay	1,345.66
	74	12"	Clay	
	772	10"	Clay	
	169	8"	Clay	
Merrick avenue, King street, southerly .....	301	12"	Cem.	48.50
Merwin st., North Main to Chestnut st.....	774	15"	Clay	....
Middlesex st., Wilbraham road, southerly.....	296	15"	Clay	580.26
	304	12"	Clay	
Mill river, intercepting sewer, Mill river to Locust st...	370	5'-3" cir.	Brick	6,066.64
	691	4'-0" cir.	Brick	
Locust st. to Hickory st....	587	4'-0" cir.	Brick	42,706.00
	131	3'-6" x 5'-3"	Brick	
	1,743	5' 9" cir.	Brick	
	779	4'-3" cir.	Brick	
	1,611	3' 3" cir.	Brick	
*in Mill and Hickory sts...	833	2'-2" x 3'-3"	Brick	9,355.23
*Hickory st. to Gunn square brook by northerly shore of Watershops pond....	4,495	2'-2" x 3'-3"	Brick	45,545.71
				103,673.58
Mill st., Main st., easterly ...	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-6" x 3'-9"	Brick	4,764.79
Monmouth st. Dorchester st., northerly and easterly....	199	12"	Clay	218.15
	171	10"	Clay	121.75
Yale st., westerly.....	64	12"	Clay	45.95
	278	10"	Clay	281.47
Berkeley st., northwesterly..	350	12"	Clay	235.62
Monroe st., Hancock to East- ern ave .....	611	18"	Cem.	902.94
	789	15"	Cem.	1,983.29
	316	12"	Cem.	
Eastern ave. to Colton st..				....
Monson ave., Greene street, northerly .....	200	8"	Clay	....
Montmorenci st. Chestnut to Massasoit st.....	676	12"	Clay	790.32

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Montrose st., State to Burr st.	388	15"	Clay	\$75.74
	217	12"	Clay	
	329	10"	Clay	
Morgan st., Garden brook to				
Main st .....	252	12"	Cem.	\$199.08
Garden brook to North st.	25	18"	Cem.	48.07
	684	18"	Clay	1,460.31
				1,707.46
Morris st., Main st., easterly.	915	2'-0" x 3'-0"	Brick	2,943.83
	496	12"	Cem.	359.07
				3,301.90
Mountainview st., Forest				
Park ave., easterly... ..	297	12"	Clay	28.19
	297	10"	Clay	
Mulberry st., Maple st., east-				
erly and northerly.....	687	15"	Cem.	1,346.18
	629	12"	Cem.	
	246	10"	Clay	
				233.59
west from Ridgewood ter-				
race.....	144	15"	Clay	....
Murray Hill ave., Liberty st.				1,479.77
northerly.....	....	....	Clay	96.34
Myrtle st. Card Factory Pond				
brook, northerly.....	107	10"	Clay	69.76
	237	8"	Clay	
Myrtle st., I. O., Main to Wor-				
cester.....	377	24"	Clay	1,003.44
Worcester st., southerly....	378	10"	Clay	355.34
Berkshire st., southerly.....	180	10"	Clay	189.63
Hampshire st., southerly....	126	10"	Clay	100.99
				1,649.40
Nelson ave., Greene street,				
northerly.....	90	12"	Cem.	27.96
Lebanon st., northerly.....	188	10"	Cem.	126.54
				154.80
Nelson street Nursery street,				
easterly .....	308	24"	Clay	....
New st., E. Court st., north-				
erly.....	237	12"	Cem.	213.03
	33	8"	Clay	14.18
				208.79
Dwight st., westerly.....	164	10"	Clay	430.99
Newman st., Knox st., west-				
erly .....	175	12"	Cem.	11.40
Norfolk st., Wilbraham road,				
southerly .....	300	15"	Clay	506.06
	300	12"	Clay	
	190	8"	Cem.	
North st. Carew st., northerly				84.88
Church to Grosvenor st....	68	18"	Cem.	157.13
Morgan to Ringgold st....	198	18"	Cem.	356.84

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Osgood to Hebron st.....	130	18"	Clay	\$426.85
	165	10"	Clay	
Bancroft st. to Brookline ave	302	18"	Clay	411.55
Bancroft st., northerly.....	153	12"	Cem.	114.54
Jefferson ave., northerly....	233	8"	Clay	177.12
Calhoun st., northerly. ....	256	8"	Clay	48.13
Waverly to Grove st.....	362	12"	Clay	302.86
Harriet st., southerly.....	86	8"	Clay	...
				\$2,079.90
Northampton ave., Wilbra-				
ham road, southerly....	1,101	12"	Clay	830.79
North Church ave., Cook's				
ave. easterly .....	209	10"	Cem.	....
Cook's avenue, westerly (for				
cost see Cook's ave.)....	133	10"	Cem.	
No Mainst Morganst southerly	232	8"	Clay	171.18
Morgan st., northerly.....	173	8"	Clay	90.69
Arch to Osgood st.....	730	15"	Cem.	713.66
*Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st...	359	24"	Clay	2,568.01
	420	20"	Clay	
	285	15"	Clay	
Grove st., northerly.....	170	12"	Clay	226.45
Douglas to Harriet st.....	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st.....	250	24"	Clay	470.75
Douglas to Eagle st.....	326	2'-4"x3'-6"	Brick	1,840.24
	272	1'-10"x2'-9"	Brick	
Eagle st., northerly.....	142	24"	Clay	449.66
Wason ave., southerly ....	215	2'-0"x3'-0"	Brick	860.00
Wason ave., northerly.....	348	12"	Clay	281.41
				10,520.67
Norwood st. Main to Hanover				
st.....	1,051	12"	Cem.	1,069.55
Nursery st. Liberty to Frank-				
lin st.....	694	2'-8" cir.	Brick	2,284.52
Franklin st., northerly.....	587	2'-8" cir.	Brick	....
				2,284.52
Oak st., Union to State.....	741	2'-0"x3'-0"	Concrt	3,092.11
Union to Tyler st.....	220	18"	Clay	752.00
	268	15"	Clay	
Walnut st. to Tyler st.....	158	18"	Cem.	280.65
				4,124.76
Oak st. I. O., north from Main				
	179	15"	Cem.	637.00
	171	12"	Cem.	
Main st., southerly .....	590	2'-2"x3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
Hampshire st., southerly....	285	18"	Clay	1,562.43
	300	15"	Clay	
	400	12"	Clay	6,198.06

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Oak Grove ave., State st. northerly.....	349 327 158 256	18" 15" 12" 12"	Clay Clay Clay Clay	.... ....
Oakland st., Dickinson st. to Belmont ave. ....	895	24"	Clay	\$2,218.71
Dickinson to Orange street.	254 350 170 218	24" 18" 12" 8"	Clay Clay Clay Clay	1,619.30 110.79
Allen to Orange street.....	625 304 193 404	18" 15" 12" 10"	Clay Clay Clay Clay	1,428.06
Sumner ave. to Garfield st.	280 221	12" 10"	Clay Clay	446.44
				<hr/> \$5,823.30
Olive st. Eastern ave. to Logan st. ....	540	10"	Clay	400.76
Orange st. Oakland st., east- erly .....	583	8"	Clay	
White st., westerly.....	381 649 699	12" 10" 10"	Clay Clay Clay	961.35
White st., easterly.....				
Orchard st., Plainfield street, westerly.....	325 301 297 140	20" 15" 12" 10"	Clay Clay Clay Clay	1,015.67
Orleans court, Orleans street, westerly.....	205	8"	Clay	....
Orleans st., Union st., north- erly .....	39 310 330	12" 12" 10"	Cem. Clay Clay	36.23 456.19
Tyler st., northerly .....	188	10"	Cem.	187.74
Pendleton ave., northerly..	231	12"	Cem.	327.73
				<hr/> 1,007.80
Ormond st. Belmont to Sum- ner ave .....	275	10"	Clay	223.55
Osgood st. Garden brook to Main st. ....	257	12"	Cem.	320.94
Garden brook to North st...	588 92	18" 18"	Cem. Clay	1,223.63 174.87
				<hr/> 1,719.44
Oxford st., Riverview terrace, northerly .....	63	12"	Clay	....
Ozark street, Grand avenue, southerly.....	456	10"	Clay	22.58

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Palmer avenue Locust street, easterly .....	351 337 14	18" 15" 12"	Clay } Clay } Cem.	\$1,190.78 ..... \$1,190.78
Park st., Main to Willow st.. Willow to Maple st.....	395 200 557	24" 24" 18"	Clay } Clay } Clay }	1,609.31 1,431.05 3,040.36
Parker st., I. O., Chicopee river to Main st.....	32 221	24" 12"	Clay } Clay }	261.81 2,486.05
Main st., southerly .....	1,098	24"	Clay	1,266.36
*Loon pond to B. & A. R. R.	1,227	12"	Clay	4,014.22
Parkwood st., Sumner ave., southerly.....	215 204	12" 10"	Clay } Clay }	70.08
Pasadena ave., White street, southerly.....	156 291	12" 10"	Clay } Clay }	258.61
Pasco st., I. O., Essex street, southerly .....	724	10"	Clay	607.80
Patton st., Garden brook to Main st.....	214 352	10" 18"	Clay } Clay }	173.73
Garden brook, easterly.....	349 537	15" 12"	Clay } Clay }	1,572.67
Peabody lane, Willow street, westerly .....	216	10"	Clay	1,746.40
Pearl st., Chestnut to Spring st. ....	514 447	24" 20"	Clay } Clay }	234.47
Spring st., easterly.....	190	1-6" cir.	Brick	1,792.62
Pease st Catharine to Bowles	250	12"	Clay	96.16
Pecousic ave., Mill river to Main st.....	327	2'-8"x4'-0"	Concrt	1,888.78
Pendleton ave. Walnut st. to Hancock st.....	287 524 429	18" 15" 12"	Cem. } Cem. } Cem. }	15.05 2,061.84 1,663.94
Hancock st. to Eastern ave.	600 793	18" 15"	Cem. } Cem. }	1,395.98
Phoenix st., Liberty street, easterly.....	236 250 89	18" 15" 10"	Clay } Clay } Clay }	3,059.92 840.32

\*Surface drainage only.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Pine street, Mill to Cedar st.	740	2'- 6"x3'-9"	Brick	\$13,659.54
	1,529	3'- 6"x5'-3"	Brick	
	500	3'-10"x5'-9"	Brick	
Cedar to Walnut st.....	62	18"	Cem.	1,665.54
	884	15"	Cem.	
	631	12"	Cem.	
Pine st., I. O., Main st., east- erly .....	1,896	24"	Clay	4,170.03
Pine st. court, Pine st., east- erly .....	348	10"	Cem.	266.39
Pineywoods ave., Washing- ton ave., northeasterly....	334	15"	Clay	....
	263	12"	Clay	
	350	10"	Clay	
Magnolia terrace, westerly.	343	20"	Clay	....
Magnolia terrace to Jackson st	404	12"	Clay	
Jackson st. to Forest Park ave.....	341	12"	Clay	....
Plainfield st. Sargeant st. to Fulton st.....	414	18"	Clay	2,525.13
	537	15"	Clay	
	456	12"	Clay	
	244	10"	Clay	
Washburn st., southerly....	122	12"	Clay	129.78
Washburn to Roseland st...	331	2'-8"x4'-0"	Brick	1,555.00
	303	2'-6"x3'-9"	Brick	2,367.93
	287	2'-4"x3'-6"	Brick	4,518.58
	294	2'-2"x3'-8"	Brick	
Rowland st., southerly.....	648	2'-2"x3'-3"	Concr't	3,402.82
Rowland st. to Talcott st...	288	24"	Clay	1,208.95
	299	20"	Clay	
Talcott ave., northerly.....	216	10"	Clay	158.46
Wason ave. to Demond ave.	304	24"	Clay	1,253.59
	249	20"	Clay	
	53	18"	Clay	
Pleasant st. Bay st. southerly	296	12"	Cem.	17,120.24
Plymouth st. Fulton st., east- erly .....	375	10"	Clay	249.74
Pomona st. Sumner avenue, northerly .....	580	12"	Clay	196.59
	297	10"	Clay	459.94
				204.92
				664.86
Portland st., Birnie ave., east- erly .....	251	12"	Clay	251.26
	224	10"	Clay	
Portsmouth street... ..	212	12"	Clay	263.65

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size	Material	Cost.
Prince st., King to Lebanon st. ....	329	12"	Cem.	\$333.15
Princeton st Bay to Amherst st	103	18"	Cem.	\$289.08
	689	18"	Clay	724.15
	151	15"	Clay	177.72
Yale to Vassar st. ....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	Cem.	195.52
				<hr/> 1,386.47
<b>Private ways:</b>				
Armory Hill sewer from Ar- mory st., through private grounds east of Armory st. to Worthington st. ....	150	2'-5" x 3'-7½"	Brick	5,318.04
	900	2'-8" x 4'-0"	Brick	
	249	2'-1" x 3'-1½"	Brick	
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts in front and around High school. ....	751	12"	Cem.	408.75
	492	24"	Clay	848.26
High school to State st. ....	88	24"	Clay	192.35
Cemetery brook, Morris st., easterly, north of Central street. ....	174	24"	Clay	<hr/> 1,449.36
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st. ....	2,936	5'-6" cir.	Brick	47,577.34
	766	5'-0" cir.	Brick	
	1,303	4'-6" cir.	Brick	
	236	3'-0" x 4'-6"	Brick	
Worthington st., northeast- erly to Lyman st., thence via Railroad land to Ar- mory st. ....	3,274	4'-7½" cir.	Brick	29,761.32
	952	4'-1" cir.	Brick	
				<hr/> 77,338.66
Jefferson ave., passage way in rear of lots on south side.	135	2'-0" x 3'-0"	Brick	....
	518	12"	Cem.	364.84
Passage way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	364.84
Potter place, State st., north- erly. ....	396	15"	Clay	402.70
	301	12"	Clay	....
	274	10"	Clay	
Sewer in ave. Hampden st., southerly, near Water st.	111	12"	Clay	147.14
Sewer, Main st. to Dale st., between Hubbard avenue and William st. ....	655	12"	Cem.	441.92



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Springfield st. and Glen- wood, via Atwater Glen.	677 598 389 1,292 40 16 1,294	8'-6" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10" x 4'-3" 24"	Brick Brick Brick Brick Brick Brick Clay	\$14,614.89      3,889.98
Prospect st. Chestnut street, easterly.....	218 199 196 950	18" 15" 12" 2'-0" x 3'-0"	Clay Clay Clay Brick	\$18,504.87 623.53 634.33 3,106.02
Pyncheon st.....	209	15"	Clay	402.22
Quebec st., I. O., Lyons st., easterly.....	634	12"	Cem.	634.33
Queenst Walnut to Hancock st	860	12"	Cem.	619.96
Quincy st. Oak to Stebbins st	522	12"	Cem.	549.58
Hancock to Stebbins st....	637	18"	Cem. }	1,708.99
Hancock to Eastern ave....	765	15"	Cem. }	
Colton to Eastern ave.....	208	10"	Clay	156.87
Railroad st. Waterst. easterly	351	12"	Clay	3,030.40
Randolph street Maplewood terrace, easterly.....	250 251	12" 10"	Clay Clay }	490.75 ....
Raymond ave. Carew street, northerly.....	277	10"	Clay	217.22
Reed st., State st., southerly,	219 309	12" 10"	Clay Clay }	110.45
Revere st. White st. southerly	750 250 209	20" 10" 8"	Clay Clay Clay }	23.22
Richelieu court, Adams st., southerly.....	160 260	12" 10"	Clay Clay }	474.31
Richelieu place, Richelieu court, easterly.....	100	8"	Clay	....
Ridgewood place, Mulberry st., northerly.....	400	12"	Clay	20.46
Ridgewood ter., Mulberry st. westerly.....	226	10"	Clay	....
Rimmon ave. Green lane to Weaver Ramble.....	859	18"	Clay	....
Ringgold st. North to Chest- nut st.....	117 632	18" 12"	Cem. } Cem. }	709.22
Ripley place, St. James ave. southerly.....	230	10"	Cem.	163.45
Riverview st. Riverview ter- race, northerly.....	63	10"	Clay	....
Forest Park ave., southerly.	299	10"	Clay	217.20

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Diverview ter., Fort Pleasant ave., easterly .....	298	15"	Clay	....
	322	12"	Clay	
	105	10"	Clay	
Rogers ave., I. O., Main st., southerly .....	97	15"	Clay	\$312.13
	152	12"	Clay	
	350	18"	Clay	
Roseland st. Plainfield street, westerly.....	350	15"	Clay	1,352.31
	173	12"	Clay	
Roseland st., Conn. river to North Main st., including 630' in Douglas st.....	579	5'-3" cir.	Brick	32,489.36
	51	1'-8" x 2'-6"	Brick	
	1,247	6'-6" cir.	Brick	
	1,330	6'-0" cir.	Brick	
Rutland ave. Wilbraham road to State st .....	199	8"	Clay	147.15
Rutledge ave., Main street, easterly .....	574	24"	Clay	49.43
Sachem st., Dickinson st., northerly.....	330	10"	Clay	345.31
Salem st. Pearl st., south and east .....	283	18"	Cem.	804.72
	99	15"	Cem.	
	290	12"	Cem.	
Sanford st .....	536	3'-2" x 4'-9"	Brick	4,014.47
Sargeant st. Fulton to Main (cost shown under Clinton street).....	920	4'-6" x 6'-9"	Brick	....
School st. Union to Mulberry street.....	549	15"	Clay	\$620.95
Union st., northerly.....	262	10"	Clay	204.00
				824.95
Scott st., White st. to Pomona st.....	300	12"	Clay	468.68
	347	10"	Clay	
	830	12"	Cem.	
Seventh st. Fulton to Main st sewer in avenue (see private ways).				661.03
Sewer (see private ways).				
Sharon st., Garden brook to Main st.....	360	15"	Cem.	762.77
	601	18"	Cem.	
	463	12"	Cem.	
Garden brook, easterly....				1,211.18
				1,973.95
Shattuck ave. Maynard ave. to Willard ave .....	200	10"	Clay	....
	143	8"	Clay	
	50	8"	Clay	
Shedford st., Springfield st., westerly .....	293	12"	Clay	601.41
	350	10"	Clay	
	590	15'	Cem.	
Sheldon st., Birnie ave. to N. Main st.....	42	10"	Clay	43.87
				43.87

\*Elliptical.

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Sherman st. Bay to Clarendon st. ....	175	12"	Cem. {	\$571.12
Bay to McKnight st. ....	443	12"	Cem. }	
State to McKnight st. ....	301	18"	Clay {	1,314.14
	301	15"	Clay }	
	544	12"	Clay }	\$1,885.36
Silver st. Armory st., easterly	302	15"	Clay {	470.38
	297	12"	Clay }	
Smith st. Knox to Dorne st.	200	12"	Cem.	27.36
Sorrento ave Sumner avenue, northerly .....	82	6"	Clay	7.49
Grenada terrace, northerly.	367	10"	Clay	209.65
				217.14
Spring st south from Lyman st	281	15"	Cem. {	2,479.35
	130	12"	Cem. }	
Worthington to State st....	470	18"	Cem. }	
	640	15"	Cem. }	
	644	12"	Cem. }	87.38
Worthington st., northerly	132	12"	Clay	
Worthington to Summer st.	183	5'-0" cir.	Brick {	1,498.24
† .....	49	4'-3"x6' 0"	Brick }	
				4,064.77
Springfield st., Atwater ter- race, northerly .....	892	20"	Clay	3,337.44
	360	18"	Clay	
	413	15"	Clay	
	286	12"	Clay	
	437	10"	Clay	
Springfield st. and Glenwood (see private ways.)				
Spruce street, Central street, northerly .....	600	12"	Cem.	558.08
Spruceland ave., Magnolia terrace, westerly .....	67	8"	Clay	....
Beechwood ave., easterly...	242	8"	Clay	136.48
Beechwood ave., westerly...	299	8"	Clay	94.83
Longhill street, easterly...	450	10"	Clay	410.40
				641.71
Stafford st., Armory street, westerly .....	402	10"	Clay	233.35
State st., Water st., westerly	70	12"	C. m.	45.37
	91	12"	Cem.	71.19
	82	12"	Clay	83.01
Water st. to Main st. ....	907	18"	Clay	1,167.64
Main to Dwight st. ....	636	18"	Clay	1,433.50
*Dwight st. to High school..	29	2'-8"x4' 0"	Brick {	4,897.66
	265	2'-2"x3'-3"	Brick }	
	417	2'-0"x3'-0"	Brick }	
At High school, connecting old with new .....	54	24"	Clay	161.88

†Segmental.

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
High school to Oak street.	2,682	2'-0" cir.	Brick	\$4,099.58
near top of hill.....	505	18"	Cem.	708.18
repairing front of Benton park.....	130	12"	Clay	212.78
Oak to Buckingham st....	2,110	18"	Cem.	2,590.03
Hancock to Sherman st....	1,147	3'-4" x 5'-0"	Brick	13,555.85
Sherman to Chapin st....	492	3'-0" x 4'-6"	Brick	
Chapin st. to Andrew st....	726	3'-0" x 4'-6"	Brick	
Andrew st. to Oak Grove ave.....	937	2'-10" x 4'-3"	Brick	10,793.96
east from Oak Grove ave. to Courtland st.....	548	2'-4" x 3'-6"	Brick	
	283	2'-2" x 3'-3"	Brick	
	352	2'-0" x 3'-0"	Brick	5,042.79
Courtland st. to almshouse..	355	24"	Clay	
	112	18"	Clay	
	1,547	12"	Clay	1,897.59
Stearns sq. (west roadway), Bridge street, northerly...	172	12"	Clay	— \$46,760.86
Stearns sq. (east roadway), Bridge street, northerly..	167	8"	Clay	205.83
Stebbins street, Union street, to State st.....	300	12"	Clay	596.89
	293	10"	Clay	
Sterns ter., Central street, northerly .. . . . .	393	12"	Clay	605.10
St. James ave., State street northerly .. . . . .	191	18"	Clay	906.01
	467	12"	Clay	
	123	10"	Clay	
Bay st. to Ripley ave.....	91	12"	Cem.	135.23
Florida st. to Ripley ave...	469	12"	Cem.	500.89
Florida st., northerly.....	417	18"	Cem.	1,073.90
	300	12"	Cem.	
Clarendon st. to Westminster street .. . . . .	248	15"	Cem.	404.60
Clarendon st., northerly....	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'-0" x 3'-0"	Brick	2,738.53
Harvard to Princeton st....	528	24"	Clay	1,587.44
Princeton st., northerly....	308	18"	Clay	965.55
	249	15"	Clay	
	57	12"	Clay	
				8,376.97
Stockbridge st., Main street, easterly .. . . . .	777	18"	Cem.	1,084.57
Suffolk st., Wilbraham road southerly .. . . . .	300	15"	Clay	294.06
Sullivan st., Armory street, easterly .. . . . .	395	12"	Clay	....

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
†Summer st., Spring to Ar- mory street.....	44	4'- 3"x6'-0"	Brick	\$24,048.88
	*1,344	4'- 2"x6'-3"	Brick	
	*1,098	2'-10"x4'-3"	Brick	
	*750	3'- 8"x5'-6"	Brick	
Sumner ave., Fort Pleasant ave. to Longhill st.....	448	12"	Clay	\$815.24
	358	10"	Clay	
Fort Pleasant ave. to Ran- dolph st.....	678	2'- 0"x3'-0"	Brick	7,968.46
Randolph st. to Jackson st..	360	1'-10"x2'-9"	Brick	
Jackson st. to Forest Park av.	360	1'- 8"x2'-6"	Brick	
Forest Park ave. to Green- leaf st. ....	367	1'- 6"x2'-3"	Brick	
Greenleaf st. to Belmont ave	355	20"	Clay	2,915.88
	851	18"	Clay	
	786	15"	Clay	
	272	12"	Clay	
	426	10"	Clay	
	100	8"	Clay	
Belmont ave., easterly ....				37.49
*Dickinson st. to White st...	2,219	2'-8"x4'-0"	Brick	11,531.37
White st., easterly.....	565	2'-2"x3'-3"	Brick	2,391.46
	207	8"	Clay	60.42
Symonds ave Worthington st to Bridge st. (includes cost of Bond place).....	300	15"	Cem.	25,720.38
Talcott ave., Fisk ave. to Plainfield st. ....	362	15"	Clay	696.59
	316	12"	Clay	549.57
Taylor st. Main to Chestnut st	650	15"	Cem.	1,347.50
	341	12"	Cem.	
	248	12"	Clay	
				255.73
				1,603.23
Temple st. Maple st., easterly outlet into High school sewer	194	15"	Clay	236.73
	169	15"	Clay	171.71
Tenth street, Garden brook, easterly .....	300	18"	Clay	406.44
	302	15"	Clay	1,255.39
	421	12"	Clay	
	4	8"	Clay	
Terrence st Union to State st	374	12"	Clay	565.26
	313	10"	Clay	
	48	10"	Cem.	
				34.02
				599.36
Thomas st Birnie ave., easterly	451	10"	Clay	333.41
Thompson st., Worthington st., southerly.....	603	12"	Cem.	688.27
St. James ave. to Bay st....	703	15"	Cem.	749.23
State to Bay st. ....	852	12"	Cem.	653.12
				2,040.61

†Segmental.

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Tracy avenue Franklin street southerly . . . . .	14	10"	Clay	\$15.48
	262	10"	Clay	.....
Tyler st., Oak to Hancock st	717	15"	Cem. }	\$15.48
	663	12"	Cem. }	1,165.68
Hancock to Eastern ave...	601	18"	Cem.	778.27
	795	15"	Cem.	644.31
Eastern ave., easterly . . . . .	251	10"	Cem.	139.49
				2,727.75
Union st., submerged-outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st. ....	2,024	3'-4" x 5'-0"	Brick }	
	302	2'-6" x 3'-6"	Brick }	27,384.14
	2,688	2'-0" x 3'-0"	Brick }	
	848	1'-8" x 2'-6"	Brick }	
Oak to Orleans st. ....	404	15"	Cem.	467.96
Hancock to Stebbins st. ....	261	2'-0" x 3'-0"	Brick }	
	335	1'-10" x 2'-9"	Brick }	2,307.33
Stebbins to Orleans st. ....	428	20"	Clay	737.72
Hancock to Eastern ave...	600	18"	Cem. }	
	800	15"	Cem. }	1,413.45
Eastern ave., easterly. ....	248	10"	Clay	152.56
				34,458.84
Vassar st., Harvard street, northerly . . . . .	550	12"	Cem.	153.37
Ventura st., Sumner avenue, northerly . . . . .	351	10"	Clay	289.51
Vernon st. Water st., easterly	639	15"	Cem.	795.08
Main st., westerly . . . . .	216	12"	Cem.	310.68
				1,105.76
Vine st., Main to Fulton st.	697	12"	Cem.	602.45
Vinton st. Liberty to Franklin st . . . . .	357	12"	Clay	357.63
	262	10"	Clay	252.13
				609.76
Walden st., Dickinson street, easterly . . . . .	166	8"	Clay	94.93
Walnut st south from State st.	69	1'-6" x 1'-8"	Brick	85.23
north from Charter ave . . . .	292	10"	Clay	418.30
Union to Charter ave. ....	279	12"	Cem.	482.50
Union to Oak st. ....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st. ....	1,142	2'-0" x 3'-0"	Brick	4,956.57
Pine to Oak st. ....	272	18"	Cem.	410.04
Hancock to Cedar st. ....	784	15"	Cem. }	
Hancock st southerly . . . . .	180	12"	Cem. }	1,269.67
North from Manhattan st. . . .	249	10"	Clay	212.35
Florence st. northerly . . . .	53	8"	Cem.	27.12
Hickory to Florence st. ....	1,026	12"	Clay	992.67
				9,667.59

SEWER CONSTRUCTION.—*Continued.*

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walter st. Birnie ave., easterly	285	12"	Cem.	\$70.58
Waltham ave., Wilbraham road, southerly.....	911	12"	Clay	928.30
Wareham st. Grand avenue, southerly.....	419	10"	Clay	21.24
Warner place, Fort Pleasant ave. to Longhill st.....	508 198 89	12" 10" 10"	Clay Clay Clay	.... \$51.88
Warriner ave., Locust street easterly.....	448	12"	Clay	399.54
Washburn st. Conn. river to B. & M. R. R. ....	1,758	7'-0" cir.	Brick	21,678.46
Washington ave., Longhill st. to Magnolia ter.....	304 823	2'- 4"x 3'-6" 2'- 2"x 3'-8"	Brick Brick	5,032.68
Wason ave., Conn. river to Plainfield st.....	451	3'-10"x 5'-9"	Brick	16,610.72
Plainfield st. to Fisk ave....	1,051	3'- 4"x 5'-0"	Brick	
Fisk ave. to Birnie ave. . .	634	3'- 2"x 4'-9"	Brick	
Birnie ave. to North Main st.	247	3'- 0"x 3'-0"	Brick	
Water st Gardner to Loring st	474	1'-10"x 2'-9"	Brick	1,182.58
Loring st., northerly.....	345	12"	Cem.	237.38
Union to Margaret st. . .	721	2'- 0"x 3'-0"	Brick	2,284.34
Union st., northerly.....	868	18"	Cem.	
Elm to State st.....	275	18"	Cem.	508.75
Elm to Pyncheon st.....	43	2'- 0"x 3'-0"	Brick	198.00
	498	2'- 6"x 3'-6"	Brick	2,949.29
Pyncheon st., northerly.. .	257	18"	Cem.	404.44
	329	15"	Cem.	460.60
	61	12"	Cem.	85.40
Worthington st, southerly..	209	10"	Clay	333.54
Worthington to Hampden st.	327	15"	Cem.	457.80
Hampden to Railroad street	321	12"	Clay	638.58
Waverly st., North Main to Chestnut st. ....	473 487	20" 10"	Clay Clay	9,740.70 1,197.00
Weaver Ramble, Rimmon ave., westerly and northerly	480	12"	Clay	....
Webster st Liberty to Frank- lin st.....	601	12"	Clay	395.54
Welcome place, Bay street, northerly.....	238	8"	Clay	....
Wellesley st., Cornell street, easterly.....	373	12"	Cem.	94.70
Wellington ave., Wilbraham road, southerly.....	287 244 291	15" 12" 10"	Clay Clay Clay	23.50

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
all ave Main st., easterly	458	15"	Clay	....
rnview st Forest Park	468	12"	Clay	\$511.16
., easterly .....	138	10"	Clay	
ord avenue Wilbraham	300	15"	Clay	\$676.23
d, southerly .....	300	12"	Clay	
	350	10"	Clay	
ford circle to King st.	541	12"	Clay	454.36
				1,130.59
minster st. Hay to State	300	15"	Clay	705.11
.....	300	12"	Clay	
	201	10"	Clay	
mes ave., southerly...	773	12"	Cem.	794.10
				1,499.21
st., Allen to Orange st	747	24"	Clay	1,717.86
	674	20"	Clay	1,490.97
	274	18"	Clay	
ge st. to Dawson ave..	388	15"	Clay	389.27
	292	15"	Clay	275.73
on st. to Dawson ave..	192	10"	Clay	187.69
on st. southerly.....	690	12"	Clay	671.32
	207	8"	Clay	84.45
				4,817.29
ey ave., Water street,				
sterly .....	450	12"	Cem.	257.32
er ave Sumner ave. to				
ngfellow terrace.....	301	18"	Clay	1,261.63
	299	15"	Clay	
	301	12"	Clay	
	221	10"	Clay	
ham ave., Wilbraham				
d, southerly .....	1,125	12"	Clay	1,020.78
1 st. to Beverly st.....	999	10"	Clay	1,121.36
	1,180	8"	Clay	2,142.14
ham road, State street,				
terly .....	248	12"	Cem.	157.79
st. to Northampton ave.	1,451	2'-0"x3'-0"	Brick	6,198.76
ampton ave. to Bristol				
et .....	472	2'-6"x3'-9"	Brick	8,970.16
	476	2'-4"x3'-6"	Brick	
	478	2'-2"x3'-3"	Brick	
	473	2'-0"x3'-0"	Brick	
	254	1'-10"x2'-9"	Brick	
	256	1'-8"x2'-6"	Brick	
l st., easterly .....	263	20"	Clay	859.35
	405	12"	Clay	
				16,186.06

itary sewer.



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wilcox st., Water st., easterly	548	15"	Cem. }	\$891.89
	327	12"	Cem. }	
Water st., westerly.....	463	12"	Cem.	
				205.76
				\$1,097.65
Willard avenue, State street, northerly.....	282	18"	Clay	785.26
	300	15"	Clay }	
	241	12"	Clay }	
Shattuck ave., southerly....	215	8"	Clay	
				....
				785.26
William st. Water to Main st	908	12"	Cem.	932.89
Main to Dale st.....	351	12"	Clay }	906.35
	288	10"	Clay }	
Water st., westerly.....	76	15"	Cem. }	
	425	12"	Cem. }	459.79
				2,319.03
Willow st., Cross to State st.	413	12"	Clay	791.42
Cross to Park st.....	265	12"	Clay	378.17
Union to Park st.....	216	18"	Cem.	325.32
Union st., to Hubbard ave..	219	10"	Clay	204.39
Wilmont st. Dickinson st. to Revere st.....	349	18"	Clay }	1,699.30
	450	15"	Clay }	1,557.40
	386	12"	Clay }	
Winchester st.....	424	12"	Clay	
Windsor st., Knox st., west- erly.....	80	15"	Cem. }	....
	485	10"	Cem. }	
Winthrop st., Main st., east- erly.....	52	18"	Cem. }	220.81
	141	15"	Cem. }	
	520	2' 6"x3' 6"	Stone	
Wolcott st., Armory street, northerly.....	220	10"	Clay	....
	104	10"	Clay	119.58
				119.58
Woodside ter. Belmont ave., northerly.....	451	10"	Clay	321.97
Forest Park ave., northerly	307	10"	Clay	....
				331.97
Worcester ave., Plainfield to Burnie ave.....	1,486	15"	Cem.	53.14
Worcester st I. O., Myrtle to Chestnut st.....	4	24"	Clay }	945.80
	290	20"	Clay }	
	382	2'-0"x3' 0"	Brick	
Chestnut to Holly street...	670	1'-10"x2'-9"	Brick	1,383.00
Oak st., easterly.....	275	12"	Clay }	2,398.09
	212	10"	Clay }	
				542.93

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material	Cost.
Pine st., easterly.....	546	20"	Clay	\$768.42
	224	18"	Clay	344.66
	349	15"	Clay	435.88
Worthington st., submerged outlet .....	194	24"	Wood	1,883.04
	22	24"	C. Iron	176.25
*Conn. river to Main st....	1,038	5'-7"x7'-0"	Brick	33,410.12
*Main to Dwight st....	821	5'-4"x7'-0"	Brick	
Dwight to Garden brook ..	566	4'-0"x6'-0"	Brick	
Garden brook to Spring st..	738	4'-3" cir.	Brick	4,361.35
Spring st., branch north....	35	5'-0" cir.	Brick	
Spring st., branch south....	47	2'-0"x3'-0"	Brick	
Spring street, easterly .....	40	18"	Cem.	614.35
	242	15"	Cem.	
	251	12"	Cem.	
Autumn st., westerly .....	113	12"	Cem.	118.78
near Sacketts ave. ....	145	10"	Cem.	111.47
West brook, easterly.....	329	15"	Clay	1,110.54
	217	12"	Clay	
	231	15"	Clay	
West brook to Autumn st..	98	12"	Clay	207.28
Sacketts ave., westerly.....	337	12"	Cem.	335.37
Sacketts ave. to Kibbe ave..	794	15"	Clay	826.90
Kibbe ave. to Federal st....	167	18"	Clay	381.28
Kibbe hollow westerly to Magazine street. ....	248	2'-8"x4'-0"	Brick	20,646.21
near Magazine to Bowdoin st.	354	2'-1"x3'-1½"	Brick	
	359	3'-4"x7'-2"	Brick	
Bowdoin st. to St. James ave.	1,307	3'-4"x6'-9"	Brick	64,910.50
Yale st., Dartmouth to Prince- ton st.....	350	24"	Clay	1,770.13
	359	18"	Clay	
	233	15"	Clay	
Princeton st., northerly....	712	12"	Clay	452.46
York st .....	1,203	7'-0" cir.	Brick	2,222.59
				13,912.27
Total .....	584 909			\$1,391,908.37

\*Elliptical.

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Segmental .....	93	6'- 0"x4'- 3"	Brick and cem. mortar.
Elliptical shaped .....	1,038	5'- 7"x7'- 0"	" " "
" " .....	821	5'- 4"x7'- 0"	" " "
" " .....	1,095	4'- 10"x7'- 3"	" " "
" " .....	1,949	4'- 8"x7'- 0"	" " "
" " .....	1,170	4'- 6"x6'- 9"	" " "
" " .....	1,040	4'- 4"x6'- 6"	" " "
" " .....	2,340	4'- 2"x6'- 3"	" " "
" " .....	1,746	3'- 8"x5'- 6"	" " "
" " .....	830	3'- 4"x5'- 0"	" " "
" " .....	586	3'- 2"x4'- 9"	" " "
" " .....	819	3'- 0"x4'- 6"	" " "
" " .....	1,093	2'- 10"x4'- 3"	" " "
" " .....	2,506	2'- 8"x4'- 0"	" " "
" " .....	5,778	2'- 2"x3'- 3"	" " "
" " .....	417	2'- 0"x3'- 0"	" " "
Egg shaped .....	566	4'- 0"x6'- 0"	" " "
" " .....	1,131	3'- 10"x5'- 9"	" " "
" " .....	1,074	3'- 8"x5'- 6"	" " "
" " .....	3,512	3'- 6"x5'- 3"	" " "
" " .....	359	3'- 4"x7'- 2"	" " "
" " .....	1,307	3'- 4"x6'- 9"	" " "
" " .....	9,586	3'- 4"x5'- 0"	" " "
" " .....	1,056	3'- 2"x4'- 9"	" " "
" " .....	2,877	3'- 0"x4'- 6"	" " "
" " .....	953	2'- 10"x4'- 3"	" " "
" " .....	364	2'- 9"x4'- 1 1/2"	" " "
" " .....	2,516	2'- 8"x4'- 0"	" " "
" " .....	4,818	2'- 6"x3'- 9"	" " "
" " .....	800	2'- 6"x3'- 6"	" " "
" " .....	150	2'- 5"x3'- 7 1/2"	" " "
" " .....	8,636	2'- 4"x3'- 6"	" " "
" " .....	8,688	2'- 2"x3'- 3"	" " "
" " .....	603	2'- 1"x3'- 1 1/2"	" " "
" " .....	21,973	2'- 0"x3'- 0"	" " "
" " .....	4,921	1'- 10"x2'- 9"	" " "
" " .....	3,980	1'- 8"x2'- 6"	" " "
" " .....	917	1'- 6"x2'- 3"	" " "
" " .....	669	1'- 4"x2'- 0"	" " "
Circular .....	3,017	7'- 0"	" " "
" " .....	3,019	6'- 6"	" " "
" " .....	1,330	6'- 0"	" " "
" " .....	1,743	5'- 9"	" " "
" " .....	3,842	5'- 6"	" " "
" " .....	949	5'- 3"	" " "
" " .....	2,257	5'- 0"	" " "
" " .....	3,274	4'- 7 1/2"	" " "
" " .....	1,762	4'- 6"	" " "
" " .....	3,362	4'- 3"	" " "

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	952	4'-1"	Brick and cem. mortar.
" .....	2,399	4'-0"	" " "
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	3,202	2'-0"	" " "
" .....	190	1'-6"	" " "
Elliptical .....	416	2'-10"x4'-3"	Brick-concrete.
" .....	245	3'-0"x4'-6"	" "
Segmental .....	60	5'-0"x2'-1"	Concrete.
Egg shaped .....	327	2'-8"x4'-0"	"
" .....	1,365	2'-6"x3'-9"	"
" .....	191	2'-4"x3'-6"	"
" .....	648	2'-2"x3'-3"	"
" .....	831	2'-0"x3'-0"	"
Circular .....	989	2'-8"	"
" .....	25,051	24"	Clay pipe.
" .....	19,160	20"	" "
" .....	30,285	18"	" "
" .....	45,222	15"	" "
" .....	94,755	12"	" "
" .....	72,754	10"	" "
" .....	12,609	8"	" "
" .....	369	6"	" "
" .....	22,811	18"	Cement pipe.
" .....	40,550	15"	" "
" .....	63,126	12"	" "
" .....	4,913	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Miscellaneous shapes .....	2,329		Stone, brick, and mortar.
Total .....	584,909		

## GENERAL CLASSIFICATION, 1907.

	Feet.	Miles.
Brick and cement mortar, . . . . .	143,917	27.257
Brick-concrete, . . . . .	661	.125
Concrete, . . . . .	4,411	.835
Clay pipe, . . . . .	300,205	56.857
Cement pipe, . . . . .	132,222	25.042
Cast-iron pipe, . . . . .	148	.028
Wood pipe, . . . . .	1,016	.193
Miscellaneous materials, . . . . .	2,329	.441
Total, . . . . .	584,909	110.778

**SUMMARY OF SEWERAGE STATISTICS.**

(In form recommended by Sanitary Section of Boston Society  
Civil Engineers.)

*For the Year Ending December 1, 1908.*

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**SPRINGFIELD, MASSACHUSETTS.**


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**GENERAL**

Population by census of 1906, . . . . .	75,000
Total area of city or town, . . . . .	38 square miles
Area served by sewerage system, . . . . .	7 " "
Collection system, { For sewage only, . . . . .	0.18 miles
{ For sewage and surface water, . . . . .	110.14 miles
{ For surface water only, . . . . .	0.44 miles
Method of disposal,—Gravity flow to Connecticut River.	

COLLECTION.

INS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS).

	For sewage only.	For sewage and surface water.	For surface water only.
Lineal feet stone, . . . . .		2,519	
“ “ brick, . . . . .		143,727	
“ “ concrete, . . . . .		4,351	
“ “ miscellaneous, . . . . .		1,825	
“ “ pipe, . . . . .	970	429,206	2,311
“ “ extended during year,		20,721	1,611
Number of inverted siphons, . . . . .		1	
“ “ manholes, . . . . .			
Method of flushing: By connections with the water system and one automatic flush tank.			
Method of cleaning: By scrapers and flushing.			
Number of automatic flush- ing tanks, . . . . .		1	
Number of direct connections with water mains for flushing, . . . . .	1	391	
Number of flushings of entire sys- tem during year. . . . .		26	
Cost of flushing, per mile, . . . . .		\$19 52	
“ “ cleaning “ “ . . . . .		\$12 78	
Number of storm overflows, . . . . .		15	
Method of ventilation: By manholes and well holes and through house stacks.			

HOUSE CONNECTIONS.

By whom made:	In the street by Sewer Department.
Sizes, . . . . .	6" and 8"
Number made during year. . . . .	521
Lineal feet laid during year,	About 13,025
Average cost per foot, connections made during year,	\$0.35

## FINANCIAL.

## CONSTRUCTION.

RECEIPTS.	EXPENDITURES.
Balance of previous year, \$ . . . . .	Collection works:—
Bonds issued, . . . . .	(a) Mains, . . . . . \$41,764 43
Appropriation, . . . . . \$14,314 37	(b) House connections, . . . . . 4,588 73
Entrance fees, . . . . . 14,073 86	
House connections, . . . . . 5,364 15	
By bills rendered, . . . . . 3,003 57	

## MAINTENANCE AND OPERATION.

Balance of previous year, \$ . . . . .	Administration, . . . . . \$2,595 60
	Tools and supplies, . . . . . 2,328 71
Appropriation, . . . . .	Repairs, . . . . . 3,246 82
	Teams, City Yard and engineering, . . . . . 2,122 30
Assessments, . . . . .	Cleaning sewers, . . . . . 1,415 71
Rentals, . . . . .	" catch basins, . . . . . \$826 96
Other sources, . . . . .	Flushing sewers, . . . . . 2,154 67
	Work chargeable, . . . . . 2,705 99
	Unclassified expenses, . . . . . 509 66
	Balance, . . . . . 323 28
Total, . . . . . \$66,755 95	Total, . . . . . \$66,755 95
	Interest on bonds, . . . . . 6,832 50
	Sinking fund, . . . . . 35,000 00

\$ . . . . . amount to be provided by issue of bonds in 1908.

\$ . . . . . Street Department funds.

**GENERAL.**

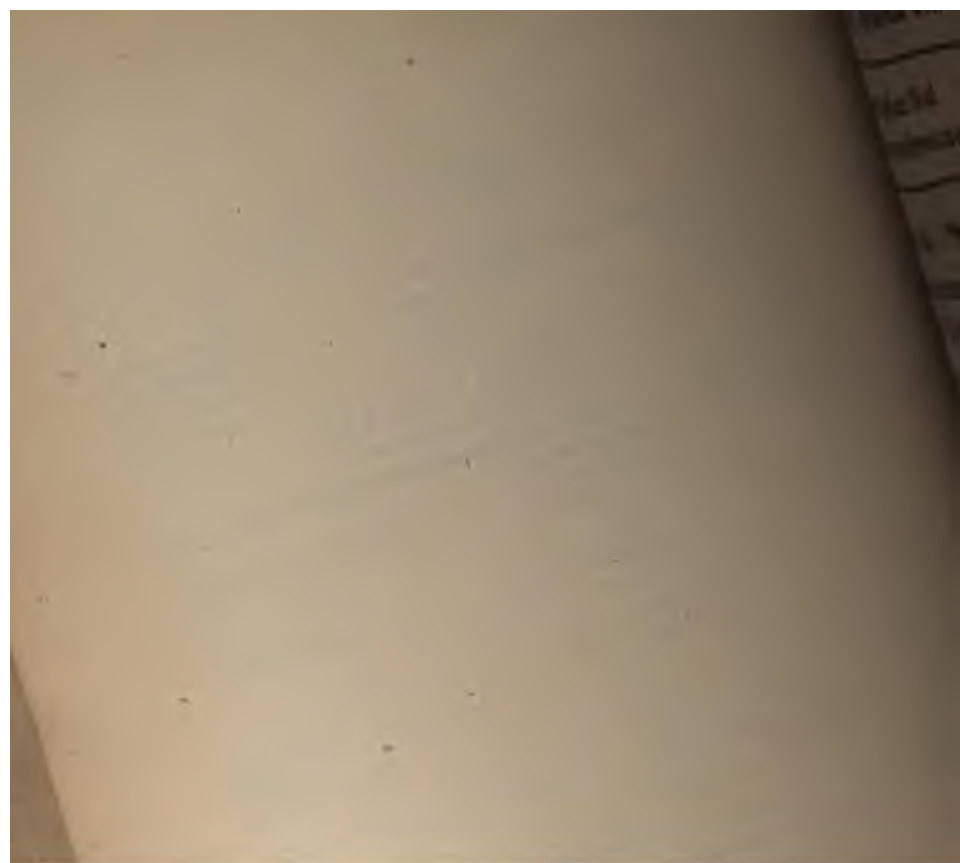
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<b>Total cost of collecting mains to date,</b>	<b>\$1,391,908 37</b>
<b>Bonded debt at date,</b>	<b>105,000 00</b>
<b>Value of sinking fund at date,</b>	<b>26,271 79</b>
<b>Average rate of interest on bonds,</b>	<b>3½%</b>
<b>Proportion of cost of system paid for by abutters in fees,</b>	<b>25%</b>

**Method of assessing abutters and rate of assessment:—**

**Entrance fee of \$25 per tenement on ground floor for dwellings and \$1.50 per front foot for business blocks.**





Annual Report

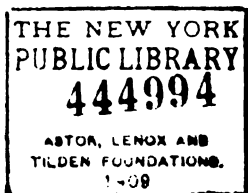
★ Superintendent of  
Streets and Sewers

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Springfield, Massachusetts



For the Year 1908



FORTIETH ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

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SPRINGFIELD, MASS., December 26, 1908.

*To the City Council:—*

In accordance with the requirements of Chapter 19, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department, and descriptions of work done during the fiscal year ending December 1, 1908.

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FINANCES IN GENERAL.

REGULAR ACCOUNTS.

RECEIPTS.

Highways and Bridges,	.	.	.	.	\$227,416 04	
Walks and Curbing,	.	.	.	.	25,807 80	
Watering Streets,	.	.	.	.	33,827 83	
					<hr/>	\$287,051 67

EXPENDITURES.

Highways and Bridges,	.	.	.	.	\$225,777 03	
Walks and Curbing,	.	.	.	.	25,068 46	
Watering Streets,	.	.	.	.	33,780 47	
					<hr/>	\$284,625 96

*Report on Streets.*

## UNEXPENDED BALANCES.

Highways and Bridges, . . . . .	\$1,639 01	
Walks and Curbing, . . . . .	739 34	
Watering Streets, . . . . .	47 36	
	<hr/>	\$2,425 71

## SPECIAL ACCOUNTS.

## ABBE AVENUE OVERHEAD CROSSING.

Limit of expenditure, . . . . .	\$61,667 34	
Receipts, . . . . .	8 44	
	<hr/>	
	\$61,675 78	
Expenditures, . . . . .	61,667 34	
	<hr/>	
Unexpended balance, . . . . .		\$8 44

## CHESTNUT AND SPRINGFIELD STREETS, WIDENING.

Limit of expenditure, . . . . .	\$12,446 00	
Expenditures, . . . . .	12,443 10	
	<hr/>	
Unexpended balance, . . . . .		\$2 90

## CITY YARD, SUMMER STREET.

Limit of expenditure, . . . . .	\$41,753 00	
Expenditures, . . . . .	36,753 01	
	<hr/>	
Unexpended balance, . . . . .		\$4,999 99

## PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.

Limit of expenditure, . . . . .	\$32,117 00	
Expenditures, . . . . .	21,417 42	
	<hr/>	
Unexpended balance, . . . . .		\$10,699 58

# WORK IN GENERAL.

	{	Grading and graveling, . . . . .	4,270 feet
		Macadamizing, . . . . .	14,415 feet
		Macadam resurfacing, . . . . .	9,173 feet
	{	Granite block paving, . . . . .	503 feet
		Wood block paving, . . . . .	1,434 feet
		Bitulithic paving, . . . . .	142 feet
		Bitulithic paving resurfacing, . . . . .	4,925 sq. yards
cleaning,	{	Gravel, . . . . .	23.37 miles
		Macadam, . . . . .	62.82 miles
		Paving, . . . . .	10.33 miles
lks,	{	Brick (new), . . . . .	1,243 feet
		Brick (relaid), . . . . .	859 feet
		Tar concrete (new), . . . . .	4,424 feet
		Tar concrete (resurfaced), . . . . .	5,767 feet
g,	{	Set, . . . . .	10,490 feet
		Reset, . . . . .	6,984 feet
alks—new,	. . . . .		51
watered,	. . . . .		88.66 miles

**FINANCES ITEMIZED.****HIGHWAYS AND BRIDGES.****RECEIPTS.**

By regular appropriation, . . . . .	\$186,600 00
From Springfield Street Railway Company,	
Corporation tax, . . . . .	24,451 35
Excise tax, . . . . .	13,646 75
By sale of land, . . . . .	1,000 00
From departments and private parties, bills rendered, . . . . .	42,786 48
Transferred from Abbe Avenue Overhead Crossing, . . . . .	3,494 98
Transferred from Sewers and Drains, . . . . .	3,000 00
Transferred from Union Street Widening, . . . . .	2,436 53
	<hr/> \$227,416

**EXPENDITURES.**

Automobile, repairs and supplies, . . . . .	\$2,216 87
Bridges, repairs and care, . . . . .	6,586 55
City teams,—horses, harness and wagons, . . . . .	1,807 45
City yard, Logan street, . . . . .	40 25
City yard, Sum- mer street, {	
Operating, etc., . . . . .	2,916 25
New concrete bins and trestle, . . . . .	5,182 40
Wagon shed, . . . . .	3,390 15
Engineering, . . . . .	352 71
Foremen's winter and holiday pay, . . . . .	1,317 53
Land damages, . . . . .	729 25
Material uncredited, . . . . .	2,525 24
Office and general expenses, . . . . .	3,091 04
Salary of superintendent, . . . . .	2,300 00
Salary of second assistant superintendent, part, . . . . .	1,052 66
Steam roller house repairs and roller equip- ment, . . . . .	1,809 17
Street construction, {	
Grading and graveling, . . . . .	5,968 46
Macadamizing, . . . . .	28,014 28
Paving, . . . . .	13,464 98

# Report on Streets.

7

Street maintenance,	{ Cleaning, . . . . .	\$33,534 44	
	{ Cleaning equipment, . . . . .	772 21	
	{ General repairs, . . . . .	22,535 78	
	{ Macadam resurfacing, . . . . .	11,277 65	
	{ Paving resurfacing, . . . . .	3,693 75	
	{ Winter expenses, . . . . .	25,095 94	
Tool and supplies, . . . . .		1,482 73	
Work and material charged to departments, . . . . .		20,225 09	
Work and material charged to private parties, . . . . .		24,394 20	
		<hr/>	
		\$225,777 03	
Unexpended balance, . . . . .		1,639 01	
		<hr/>	\$227,416 04

## BILLS RECEIVABLE.

Bills receivable November 30, 1907, . . . . .	\$1,598 15	
Bills committed, fiscal year 1908, . . . . .	42,741 71	
	<hr/>	\$44,339 86
Bills paid, fiscal year 1908, . . . . .	\$42,786 48	
Abatements, . . . . .	423 80	
	<hr/>	43,210 37
		<hr/>
Bills receivable November 30, 1908, . . . . .		\$1,129 49

## WALKS AND CURBING.

### RECEIPTS.

By regular appropriation, . . . . .	\$10,000 00	
From abutters for work done previous to 1908, . . . . .	7,961 86	
From abutters for work done during 1908, . . . . .	7,845 91	
	<hr/>	\$25,807 80

### EXPENDITURES.

City teams, work done in 1907, . . . . .	\$246 46
Crosswalks, new and relaid, . . . . .	4,154 40
Engineering, . . . . .	336 95
Foremen's winter and holiday pay, . . . . .	69 48
Material, . . . . .	344 91
Office and general expenses, . . . . .	18 19
Salary of second assistant superintendent, part, . . . . .	447 02



*Report on Streets.*

Setting and resetting curbing, . . . .	\$3,570 30	
Sidewalk repairs not chargeable, . . . .	700 73	
Work and material charged to abutters, . .	10,629 29	
Work and material charged to departments, .	3,763 15	
Work and material not chargeable, . . . .	787 58	
	<hr/>	
	\$25,068 46	
Unexpended balance. . . . .	739 34	
	<hr/>	\$25,807 80

**BILLS RECEIVABLE.**

Bills unpaid November 30, 1907, . . . .	\$7,926 24	
Bills committed, fiscal year 1908, . . . .	14,579 29	
	<hr/>	\$22,505 53
Bills paid, fiscal year 1908, . . . . .	\$15,807 80	
Abatements, . . . . .	43 69	
	<hr/>	15,851 49
Bills receivable November 30, 1908,		\$6,654 04

**WATERING STREETS.****RECEIPTS.**

By appropriation, . . . . .	\$5,000 00	
By watering streets assessments, . . . . .	26,502 59	
From Springfield Street Railway Company, by agreement, . . . . .	2,283 37	
By bills rendered, . . . . .	41 87	
	<hr/>	\$33,827 83

**EXPENDITURES.**

Equipment, two new carts, . . . . .	\$745 75
General expenses, . . . . .	312 83
Standpipes and car hydrants, construction, maintenance, opening and closing, . .	1,708 75
Standpipe bases, construction and maintenance,	128 70
Watering carts, storage, painting and repairs,	1,013 45
For use of teams as per pay rolls, . . . .	1,464 69

# Report on Streets.

9

For use of teams as per contracts, . . .	\$17,871 21	
American Car Sprinkler Company, as per contracts, . . . . .	9,068 30	
Inspector, . . . . .	1,043 35	
Inspector's horse and carriage, . . .	391 21	
Tools and materials, . . . . .	32 23	
	<hr/>	
	\$33,780 47	
Balance unexpended, . . . . .	47 36	
	<hr/>	\$33,827 83

## ABBE AVENUE OVERHEAD CROSSING.

### LIMIT OF EXPENDITURE.

By order of the City Council, . . . .	\$61,439 00	
By receipts, sale of lumber, etc., . . .	236 78	
	<hr/>	\$61,675 78

### EXPENDITURES.

Previously reported, . . . . .	\$28,975 92	
Bridge—Boston Bridge Works, contract, .	14,999 00	
Filling—F. T. Ley & Co., contract, . .	7,607 36	
Grading, . . . . .	635 03	
Railing—Wyckoff & Lloyd, contract, . .	1,158 90	
Posts, etc., . . . . .	349 25	
Tar concrete walks, . . . . .	1,800 15	
Macadam and gutter paving, . . . . .	1,796 51	
Engineering, . . . . .	655 96	
Miscellaneous, . . . . .	194 33	
	<hr/>	
	\$58,172 41	
Transferred to H. and B., maintenance, .	3,494 93	
	<hr/>	
	\$61,667 34	
Unexpended balance, . . . . .	8 44	
	<hr/>	\$61,675 78

**CHESTNUT AND SPRINGFIELD STREETS, WIDENING.**

Limit of expenditure, previously reported, **\$12,446 00**

**EXPENDITURES.**

Previously reported, . . . . .	<b>\$8,885 12</b>
Land damages, . . . . .	<b>4,047 26</b>
Miscellaneous, . . . . .	<b>10 70</b>

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**\$12,443 10**

Unexpended balance, . . . . .	<b>2 90</b>
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**\$12,446 00**

**CITY YARD, SUMMER STREET.**

Limit of expenditure, previously reported, . **\$41,753 00**

**EXPENDITURES.**

Previously reported, . . . . .	<b>\$36,500 01</b>
Wagon shed, . . . . .	<b>253 00</b>

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**\$36,753 01**

Unexpended balance, . . . . .	<b>4,999 99</b>
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**\$41,753 00**

**PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.**

Limit of expenditure, previously reported, . **\$32,117 00**

**EXPENDITURES.**

Previously reported, . . . . .	<b>\$11,689 18</b>
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Concrete arch bridge, Culgin, Pace

Contracting Co., by contract, **\$8,000 18**

Filling, . . . . .	<b>167 00</b>
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Engineering and inspection, . . . . .	<b>355 29</b>
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Total cost of bridge, . . . . .	<b>8,522 47</b>
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Macadamizing between South street and concrete bridge, . . . . .	<b>1,071 73</b>
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Miscellaneous, . . . . .	<b>184 04</b>
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**\$21,417 42**

Unexpended balance, . . . . .	<b>10,699 58</b>
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**\$32,117 00**

WORK ITEMIZED.

BRIDGES.

REPAIRS AND CARE.

	Description of Work.	Cost.
Abbe avenue Overhead Crossing,	Stairways and miscellaneous,	\$444 79
Armory street, over N Y., N. H. & H. Railroad,	Floor repairs,	13 25
Berkshire street, Red House Crossing,	Floor repairs,	21 98
Ludlow, I. O.,	Floor repairs,	36 77
Main street, I. O.,	Floor repairs,	15 92
North end, over Conn. River,	New stringers and under floor in part; new top floor and sidewalk repairs,	4,559 48
Old Toll,	Renewing aprons on piers and miscellaneous repairs,	944 45
Pasco street, I. O.,	Floor repairs,	32 70
Plainfield street,	Floor repairs,	175 89
South end, over Conn. River, and N. Y., N. H. & H. Railroad,	Floor repairs,	326 36
Sundry bridges,	Miscellaneous repairs,	14 90
		<hr/> \$6,586 55

## STREET CONSTRUCTION.

Fiscal year 1908.

## GRADING AND GRAVELING.

Street.	Limits.	Length. in feet.	Area in sq. yds.	Total Cost.
Alderman street,	Dickinson street to Sorrento avenue,	1,010	3,828	\$319 93

Street.	Limita.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
<b>Abbe avenue bridge approaches,</b>					
Allen street,		872	2,325	\$0 71	\$1,646 37
Birnie avenue,		494	1,630	57	930 75
Euclid avenue,		607	2,698	62	1,676 46
Farnsworth street,		1,169	3,896	49	1,926 84
**Fisk avenue,		513	1,710	56	965 68
Franklin street,		556	1,235	1 15	1,422 96
**Genesee street,		1,139	3,797	63	2,411 98
Hamburg street,		276	821	1 25	1,026 76
Kenwood Park,		574	1,786	60	1,083 20
Magnolia terrace,		721	3,888	42	1,630 95
Main street, I. O.,		585	3,120	365	1,140 93
Mapledell street,		1,160	3,738	64	2,398 87
Oakland street,		972	3,239	428	1,386 52
Parkwood street,		731	3,354	72	2,427 75
*Pecousic avenue,		450	1,500	426	639 70
**Plainfield street,		350	972	99	963 07
		805	1,970	1 01	1,995 89

\* Paid for from Special Accounts. \*\* Includes the cost of cinder or sand foundations.

## STREET CONSTRUCTION.

Fiscal year 1908.

## GRADING AND GRAVELING.

Street.	Limits.	Length. in feet.	Area in sq. yds.	Total Cost.
Alderman street,	Dickinson street to Sorrento avenue,	1,010	3,828	\$319 98
† Bay road,	Berkshire street to Boston road,	1,800	4,000	1,886 01
Foster street,	Knox street easterly and northerly,	477	1,219	1,052 18
* Main street, I. O.,	Westerly of Parker street,	988		3,280 34
	Total,	4,270	9,047	\$5,968 46

† Graveling only.      \* Grading only.

MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
* Abbe avenue bridge approaches,		872	2,325	\$0 71	\$1,646 37
Allen street,	Randall avenue southeasterly,	494	1,630	57	930 75
Birnie avenue,	Douglas to Donald street,	607	2,698	62	1,676 46
Euclid avenue,		1,169	3,896	49	1,926 84
Farnsworth street,	Width of 20 feet,	513	1,710	56	965 68
**Fisk avenue,	Talcott to Rowland avenue,	556	1,235	1 15	1,422 96
Franklin street,	Webster to Genesee, width of 20 feet,	1,139	3,797	63	2,411 98
**Genesee street,	Width of 20 feet,	276	821	1 25	1,026 76
Hamburg street,	Width of 20 feet,	574	1,786	60	1,083 20
Kenwood Park,		721	3,888	42	1,630 95
Magnolia terrace,	Sumner avenue to Spruceland avenue,	585	3,120	365	1,140 93
Main street, I. O.,	Westerly of Parker street,	1,160	3,738	64	2,398 87
Mapledell street,		972	3,239	428	1,386 52
Oakland street,		731	3,354	72	2,427 75
Parkwood street,	Belmont avenue to Sumner avenue,	450	1,500	426	639 70
*Pecousic avenue,	Main street to Mill river bridge, width of 20 feet,				
		350	972	99	963 07
**Plainfield street,	Rowland avenue southerly,	805	1,970	1 01	1,995 89

\* Paid for from Special Accounts. \*\* Includes the cost of ciinder or sand foundations.



## STREET CONSTRUCTION.

## MACADAM—CONTINUED.

Street	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
• Roland avenue.	Plainfield street to Abbe avenue bridge approach,	600	1,674	84	\$1,414 52
• Sumner avenue.	(Southerly side) Park entrance to Lenox street,	1,751	3,935	50	1,994 94
• Springfield street.	Chestnut street northeasterly, done in 1907,	14,415	47,288		1,539 58
					\$30,623 72

\* Includes the cost of cinder or sand foundations.

## MACADAMIZING BY PRIVATE PARTIES.

Street.	Limits.	Length in feet.	Area in sq. yds.
Belmont avenue,	(Easterly side) Oakland street to Sumner avenue,		1,905
• Chapin terrace,	Chestnut to Marvin street,	601	3,112
• Marvin street,	Pratt street to Chapin terrace,	430	1,440
• Pratt street,	Chestnut to Marvin street,	000	2,000
• Private street.		1,031	8,457

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
*King street, Lyman street, State street, Townslay avenue, *Worthington street,	Street Railway turnout, Chestnut street easterly, Main to Dwight street,	Wood blocks, Granite blocks, Wood blocks, Bitulithic,	317 503 478 142	1,023 2,095 2,403 214	\$1 13 3 27 2 50	\$859 31 2,367 03 7,850 16 536 00
*Worthington street, *Worthington street,	Street Railway turnout at Sackett place, Street Railway turnout, be- tween Federal and Armory streets,	Wood blocks, Wood blocks,	265 374 2,079	886 1,312 7,933		746 10 1,106 38 \$13,464 98

\*Cost the City 90 cents a square yard. Balance of cost borne by the Springfield Street Railway Company according to agreement.

## PAVING DONE BY THE SPRINGFIELD STREET RAILWAY COMPANY.

Street.	Limits.	Material.	Area in sq. yards.
North Main street, State street,	Branch-off at Wason avenue, Branch-off at Walnut street,	Vitrified brick, Vitrified brick,	196 278 474

**STREET MAINTENANCE.****GENERAL REPAIRS.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total Cost.
Acushnet ave.,		\$10 76	\$9 81		\$20 57
Allen street,	\$398 49		14 00	\$5 24	417 73
Arch street,		1 69	18 56		20 25
Armory street,	259 18	3 35	89 70	189 67	541 90
Bay road,	119 47				119 47
Bay street,	118 36	25 76	3 49		147 61
Beaumont st.,			35 17		35 17
Belmont ave.,	48 35	97 90	301 00	35 87	483 12
Benton street,	35 24				35 24
Berkeley street,	21 46				21 46
Berkshire st.,					
I. O.,	920 46		7 04	15 22	942 72
Bircham Bend road,	71 70				71 70
Birnie ave.,		36 75	30 67	7 50	74 92
Bond street,		3 38		49 83	53 21
Boston road,	731 08	57 88		10 51	799 47
Bowles street,	23 80				23 80
Bradford street,			23 40		23 40
Bridge street,		78 80	10 63	25 27	114 70
Brown street,	31 61				31 61
Buckingham st.	66 95				66 95
Burr street,	26 55				26 55
Cambridge st.,	48 70				48 70
Carew street,	46 58	14 12	481 61		542 31
Cass street,	41 95		4 47		46 42
Central street,		157 63		13 64	171 27
Charles street,		23 46			23 46
Cherry street,	55 82			33 05	88 87
Chestnut street,	2 46	34 31	3 49	42 95	83 21
Chicopee road,				37 02	37 02
Clantoy street,			87 55		87 55
Clifford street,	21 84				21 84
Cliftwood st.,	51 45				51 45
Cornell street,	123 56			20 58	144 14
Court street,		23 00	22 53		45 53

**STREET MAINTENANCE.**  
**GENERAL REPAIRS.—CONTINUED.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total Cost.
Crystal avenue,	\$27 47		\$21 63		\$49 10
Cypress street,			27 61	\$8 75	36 36
Dawes street,	31 86				31 86
Dexter street,	31 37				31 37
Dickinson st.,	159 42				159 42
Donald street,			48 83	2 50	51 33
Dwight street,			5 92	25 93	31 85
Eastern ave.,		\$41 61	11 06		52 67
Elm street,			12 88	11 36	24 24
Essex street,		20 96			20 96
Essex st., I. O.,	29 32				29 32
Ferry street,		10 12	41 41		51 53
Fiberloid street,					
I. O.,	86 28				86 28
Firglade ave.,	44 10				44 10
Forest Park av.,	7 45	105 58			113 03
Fort Pleasant avenue,	76 77	29 81	5 62	49 84	162 04
Franklin street,		51 72	14 58		66 30
Fulton street,		11 50	12 69	10 84	35 03
George street,	29 54				29 54
Girard avenue,	39 97				39 97
Greene street,	33 73				33 73
Grenada ter.,	26 42		11 71		38 13
Hampden st.,					
I. O.,	37 89				37 89
Hampshire st.,					
I. O.,	32 22				32 22
Hancock street,	102 46	1 69	3 48		107 63
Harrison ave.,		24 70		266 61	291 31
Hawley street,	35 38				35 38
Hickory street,	10 44	7 24		15 20	32 88
High street,		9 04	3 37	28 94	41 35
Hillman street,				32 17	32 17
Ingersoll Grove street,	25 70		26 73		52 43

**STREET MAINTENANCE.****GENERAL REPAIRS.—CONTINUED.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total Cost.
John street,			\$29 34		\$29 34
King street,	\$2 46	\$14 69	45 59		62 74
Knox street,	2 77		53 01		55 78
Liberty street,	77 01	303 69	11 49	\$31 86	424 05
Locust street,		62 17		12 45	74 62
Loughil street,	234 17	16 75	103 51		354 43
Lyman street,		29 84	19 76	4 37	53 97
Main street,		5 49	53 95	581 71	641 15
Main st., I. O.,		248 60	170 19	8 84	427 63
Manhattan st.,	46 98				46 98
Maple street,		82 13		54 74	136 87
Mapledell st.,	49 32				49 32
Marion street,	104 38				104 38
McKnight st.,	39 24	1 93			41 17
Mill street,		20 75	20 11		40 86
Monmouth st.,	29 52				29 52
Montmorenci st	81 57				81 57
Montrose st.,	53 07				53 07
Mulberry st.,		24 02	4 32		28 34
Myrtle st., I. O.,	92 79				92 79
Norfolk street,			30 89		30 89
Northampton avenue,	184 05				184 05
North Main st.,		260 74		29 14	289 88
Oak st., I. O.,	135 33	37 42		8 90	181 65
Orange street,	30 10		222 25		252 35
Orleans street,			35 00		35 00
Park street,		12 11	9 49		21 60
Parker street,	949 73		11 18		960 91
Pasco st., I. O.,	141 62			5 61	147 23
Pease street,	46 13				46 13
Pine street,		3 37	20 40		23 77
Plainfield st.,	59 60	40 92	12 79	13 79	127 10
Plumtree road,	39 59				39 59
Princeton st.,	20 91	20 75			41 66
St. James ave.,	113 28	25 49			138 77

**STREET MAINTENANCE.**  
**GENERAL REPAIRS.—CONTINUED.**

Street.	Gravel.	Macadam.	Receiving Basins.	Miscellaneous.	Total Cost.
Salem street,		\$28 40			\$28 40
Sharon street,		22 90			22 90
Sixteen Acre rd.	\$148 99				148 99
Spring street,		47 93	\$19 18		67 11
Springfield st.,	56 67	229 15		\$148 41	434 23
Spruceland ave.	33 18				33 18
State street,		642 22	741 47	249 20	1,632 89
Stearns square,		21 13			21 13
Stebbins street,	2 60		21 82		24 42
Stony Hill road,	67 78				67 78
Summer street,		10 04	5 30	5 06	20 40
Sumner ave.,	53 93	21 87	5 62		81 42
*Sundry streets,	689 26	318 64	526 74	236 29	1,770 93
Taylor street,		36 98		4 18	41 16
Thompson st.,			46 90		46 90
Tinkham road,	127 93				127 93
Townsley ave.,		2 79	18 86		21 65
Tyler street,	42 43	3 45			45 88
Union street,	2 45	26 28	163 29		192 02
Vassar street,	27 96				27 96
Ventura street,			27 01		27 01
Walnut street,		30 67	18 67	100 82	150 16
Water street,		154 21	24 75	6 84	185 80
Wellesley st.,	29 70				29 70
Westford ave.,	125 08				125 08
White street,	25 23	122 26	92 61		240 10
Wilbraham ave.	128 17				128 17
Wilbraham rd.,	1,740 43	155 37		247 70	2,143 50
Willow street,		22 23	27 95		50 18
Winchester st.,	63 78				63 78
Windsor st.,	79 49	3 16			82 65
Woodside ter.,	14 45		8 01		22 46
Worcester st.,					
I. O.	313 11	82 37	76 02	17 36	488 86
Worthington st.		906 29	15 02	323 84	1,245 15
	\$10,441 09	\$4,981 96	\$4,083 13	\$3,029 60	\$22,535 78

\* Individual street repairs costing less than \$20.00

## SIDEWALKS AND CURBING.

Fiscal year 1908.

CONSTRUCTION AND RECONSTRUCTION.  
By orders of the City Council.

Street.	Length in feet.	SIDEWALKS.		CURBING.		Order approved.
		Material.	Description.	Length in feet. 4"	6"	
Abbe ave.,	850	Tar concrete,	New,	1,693		July 2, 1906.
Beacon street,				505		June 30, 1908.
Catharine street,	100	Brick,	Relaid,			Nov. 26, 1907.
Catharine street,	428	Tar concrete,	Skim coated,			Nov. 26, 1907.
Clantoy street,	1,155	Tar concrete,	New,	2,436		June 23, 1908.
College ave.,	406	Tar concrete,	Skim coated,			Jan. 14, 1908.
* Crystal ave.,				105		Sept. 15, 1908.
Dresden street,	801	Tar concrete,	Skim coated,			Aug. 20, 1907.
Dresden street,	280	Tar concrete,	New,			July 7, 1908.
Everett street,	50	Brick,	Relaid,			Nov. 26, 1907.
* Fisk avenue,	70	Brick,	New,			Oct. 13, 1908.
Foster street,	280	Brick,	New,	604		Apr. 7, 1908.
Keith street,				1,856		Oct. 22, 1907.
Monmouth street,	2,133	Tar concrete,	Skim coated,			May 28, 1907.
Palmer ave.,	180	Brick,	Relaid,			June 30, 1908.
Palmer ave.,	170	Tar concrete,	Skim coated,			June 30, 1908.
Reed street,	1,104	Tar concrete,	New,	1,227		Aug. 20, 1907.

\* Enclosed by photo.

## SIDEWALKS AND CURBING.—CONTINUED.

Street.	Length in feet.	SIDEWALKS.		CURBING.		Order approved.
		Material.	Description.	Length in feet. 4"	6"	
Reed street,	133	Brick,	Relaid,			Aug. 20, 1907.
Shattuck street,	893	Brick,	New,	1,455		Oct. 22, 1907.
Springfield street,	605	Tar concrete,	New,	608		July 2, 1907.
White street,	430	Tar concrete,	New,			Dec. 24, 1907.
William street,	396	Brick,	Relaid,			Jan. 14, 1908.
Yale street,	1,829	Tar concrete,	Skim coated,	10,490		July 23, 1907.



## SIDEWALKS AND CURBING.

## CONSTRUCTION BY ORDERS OF ABUTTERS.

Street.	Length in feet.	SIDEWALKS.		CURBING.	
		Material.	Description.	Length in feet. 4"	10"
Bay street,				53	
Belmont avenue,	44	Tar concrete,	Skim coated,	305	
Bloomfield street,					
Bowdoin street,	300	Brick,	Relaid,		
Eastern avenue,	55	Brick,	New,	55	
*High street,				170	
Kensington avenue,				360	
*Main street,					50
*Main street, I. O.,				267	
Oakland street,	477	Brick,	Relaid,	747	
State street,	80	Brick,	Relaid,		
St. James avenue,	50	Brick,	Relaid,		
*Welcome place,				217	
Wilcox street,				54	
				2,228	50

\*Curbing furnished by owner of abutting property.

STREETS MADE PUBLIC.

Name.	Limits.	Length in feet.	Width in feet.
Abbe ave bridge and approaches,	Fisk avenue to Birnie avenue,	1,008	34
Brace street,	Belmont avenue to Dickinson street,	367	45
Chester street,	Central street southerly,	296	35.5
Chicopee road,	Carew street to St. James avenue,	4,320	50
Cliftwood street,	Sumner avenue southerly,	450	40 to 36.5
Clinton street approaches,	Conn. River R. R. to Fulton street,	610	30
Continental street,	Sumner avenue southerly,	450	50
Foster street,	Central street southerly to Knox street,	723	33
Harriet street,	North Main to Chestnut street,	817	50
Hayden avenue,	State street northerly,	878	30
Melrose street,	Walnut street easterly and southerly,	490	33 to 30
Pecousic avenue,	Gardner to York street,	862	100
Ripley place,	St. James avenue southerly,	211	24.5
Rowland street,	Plainfield street to Conn. R. R.,	886	50
		12,868	

STREETS RELOCATED AND WIDENED.

Name.	Limits.	Length in feet.	Width in feet.
Dickinson street,	Belmont avenue to Long-meadow line,	2,677	60
Main street, I. O.,	Rogers avenue to near Parker street,	1,154	66
		3,831	

**INVENTORY.****STREET AND SEWER DEPARTMENTS.****Buildings and structures.**

Barn, wagon house, and shed, . . . . .	\$18,540 60
Scales, . . . . .	850 00
Trap rock bins and trestle, . . . . .	9,500 00
Engine, engine house, trap rock crusher and tools, . . . . .	1,500 00
Steam roller house, . . . . .	1,000 00

**Horses, wagons, etc.**

Automobile, . . . . .	1,800 00
Sixteen horses, . . . . .	2,625 00
Two mules, . . . . .	400 00
Harness, blankets, etc., . . . . .	832 30
Fifteen wagons and carts, . . . . .	1,755 00
Eleven sleighs, sled, etc., . . . . .	400 00

**Lands.**

City yard, Logan street, . . . . .	7,000 00
City yard, Summer street, . . . . .	23,000 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Island pond, . . . . .	380 00
Gravel bank, Boston road, . . . . .	80 00
Trap rock quarry, Westfield, . . . . .	225 00

Office furniture, . . . . .	300 00
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**Rollers.**

Horse rollers, . . . . .	250 00
Six steam rollers, . . . . .	8,780 00

**Special tools and machines.**

Concrete mixer, . . . . .	925 00
Hoisting engine, . . . . .	700 00
Macadam scraper, . . . . .	100 00
Road machines, . . . . .	100 00
Sanding machines, . . . . .	200 00
Scarifier, . . . . .	500 00
Sewer pumps and portable boiler, . . . . .	50 00
Street sweepers and cleaning equipment, . . . . .	598 31

**Street and sewer materials.**

Castings and patterns, . . . . .	465 17
Cement, . . . . .	27 19
Coal, oil, tanks, etc., . . . . .	230 00

Lumber, . . . . .	\$2,861 83
Sand and sand tickets, . . . . .	42 40
Trap rock, . . . . .	580 55
Vitrified clay and wood blocks, . . . . .	670 62
Vitrified clay pipe, . . . . .	194 08
Street watering equipment.	
Thirty-four wagons, . . . . .	5,760 00
Tools and supplies, miscellaneous.	
Lanterns, globes, etc., . . . . .	43 10
Machine shop tools and stock, . . . . .	990 00
Sidewalk tools and materials, . . . . .	2,170 00
Street and sewer tools, . . . . .	4,233 28
	<hr/>
	\$98,463 56

## GENERAL DESCRIPTIONS.

### GRADING.

Main street, Indian Orchard, westerly of Parker street, has been graded to the new lines established by the City Council, by which the curvature of the street has been reduced.

This work, which was recognized as most necessary, was started on February 28, at which time there was considerable frost in the ground, in order to provide employment for a number of men, who on account of the general business depression had been idle for some time.

The total cost of the work was \$3,230.34, which includes land damages amounting to \$729.25.

### MACADAMIZING.

The total length of streets which has been macadamized during the year is 14,415 feet, which has been done at a cost of \$30,623.72. This sum is somewhat less than has been expended for such work in previous years. The largest expenditures

were made for work in Franklin and Oakland streets, and Main street, Indian Orchard.

#### PAVING.

Wood block paving has been laid in State street between Main and Dwight streets at a cost of \$7,850.16. Similar paving has also been laid throughout the lengths of three turn-outs of the Springfield Street Railway Company in Worthington and King streets at a total expense to the City of \$2,711.79, or at the rate of ninety cents per square yard of wood blocks.

The balance of the cost was borne by the Springfield Street Railway Company and represents the estimated cost of laying vitrified brick paving which was required to be laid by that Company by a condition of the franchise granted by the Board of Aldermen. This condition was so modified that wood block paving could be laid, if in the opinion of the Board of Supervisors it was deemed necessary.

Lyman street for a distance of 503 feet easterly of Chestnut street has been paved with old granite blocks which were removed from State street. This work was done at a cost of \$2,367.03.

Townsley avenue has been paved with bitulithic at a cost of \$536.00. This work was done by Warren Brothers Company and is guaranteed for a period of five years.

#### BRIDGES.

The stringers and underfloor, in part, and the complete wearing surface of the roadway and sidewalk of the North End bridge over the Connecticut river, have been renewed at a total cost of \$4,559.48.

Authority has been granted by the City Council to paint the North and South End bridges over the Connecticut river, and

as this work is most necessary, it should be done during the early part of the coming season.

Various repairs, including the renewing of a part of the plank aprons in the northerly faces of the piers of the Toll Bridge, have been made. This planking was torn away during the spring freshet of 1908, leaving the stonework exposed and liable to serious erosion, if neglected.

ABBE AVENUE CROSSING, OVER THE BOSTON AND MAINE RAILROAD.

This work, which was started in the year 1907, has been completed during the past year by the erection of an iron bridge, which has been paved with wood blocks, macadamizing the roadways, building tar concrete sidewalk, railings, etc.

In addition, reinforced concrete stairways have been built on the slopes fronting on Birnie and Fisk avenues, for the benefit of pedestrians.

PECOUSIC AVENUE ARCH BRIDGE AND WATER STREET EXTENSION.

The reinforced concrete arch bridge over Mill river, at Pecousic avenue, has been completed during the year by the Culgin-Pace Contracting Company, under a contract dated October 16, 1907, thus eliminating one of the chief obstacles to the opening of Pecousic avenue and the extension of Water street from Gardner to South street.

All lands between the above limits, which will be required to open the avenue to its full width, have been acquired and the buildings thereon have been disposed of and will be removed during the coming winter. This will enable the construction to proceed at such time and in such manner as may be decided by the Board of Supervisors of Highways and Bridges.

Money to defray the cost of a part of this work, at least, is now available, there remaining at the close of the fiscal year

unexpended balances credited to the Pecosic avenue and Water Street Extension Accounts, amounting to \$17,925.59.

#### WALKS AND CURBING.

Brick and tar concrete sidewalks aggregating 1,243 and 4,424 feet respectively have been laid in ten streets. About 6,626 feet of walks have been relaid or resurfaced. Curbing amounting to 10,490 feet has been set on nineteen streets.

#### WATERING STREETS.

The watering of 88.66 miles of streets has been done under the same methods heretofore prevailing, by carts owned by the City and operated by hired teams, and by cars owned and operated by the American Car Sprinkler Company of Worcester, Mass., under contract.

#### ROAD PRESERVING AND DUST LAYING.

A number of experiments have been made towards preserving macadam roads and laying dust. North Main, King, and Locust streets were thoroughly treated with a tar preparation for a depth of two to three inches, with results only fairly satisfactory. The best results were obtained on King street, where the traffic is considerably less than on either of the other streets.

Dust-laying preparations have been applied to Springfield street hill, State street east of the Highland Division, N. Y. N. H. & H. R. R., and Forest Park avenue. On the whole it can be stated that the results were not entirely satisfactory, as in State street the dust was not laid for more than a week or two after treatment, and the surfaces of the other two streets disintegrated in part.

This subject is receiving a great deal of attention, not only in our own state but elsewhere as well, and undoubtedly the

knowledge gained from the experiments which have been made with a great many varieties of materials, now on the market, will serve to guide the intelligent selection and proper method of applying materials which will be suitable to use on roads varying as to types and traffic conditions.

Certain roads in a near-by state, which were examined during the latter part of the year have shown apparent satisfactory wearing quality under the heavy automobile traffic. These have been in use for one or two years and were treated in some cases with straight tar, and in other cases with tar and asphalt combination. It would appear that asphalt, either alone or in combination with other materials, possesses merits superior to many other mixtures which have been offered, and it is hoped that experiments with such materials may be made during the coming year.

The additional cost of macadam road construction or reconstruction, due to the use of such material, would approximate fifteen cents per square yard.

#### SPRINGFIELD STREET RAILWAY WORK.

The Springfield Street Railway Company, acting under authority of franchise grants of the Board of Aldermen, have installed a turnout in Worthington street near Kibbe avenue, and one in King street near Walnut street. A long turnout has been built in Belmont avenue between Garfield street and Sumner avenue. In connection with the latter work, the north-easterly side of Belmont avenue, between the limits above described, was macadamized by and at the expense of the Railway Company.

Double branch-offs have been laid from each track in Dwight street into State street, and similar track construction was placed from both tracks in State and Lyman streets connecting with the tracks in Main street.

A double branch-off has also been laid at the corner of



Wason avenue and North Main street, and a third track about two hundred feet long has been laid in State street, westerly of Walnut and connected with the track in Walnut street. This arrangement serves as a turnout on the Walnut street line without congesting traffic on Walnut street, which is quite narrow near State street.

Both tracks in Main street, between Bliss and Liberty streets, with the exception of those in front of Court Square, have been relaid with an improved type of grooved rail, and the track on the westerly side of Main street, between Emery and Sargeant streets, has been relaid.

With the exception of the Belmont avenue track, where it was not required, all of the work above described has been done in a most thorough manner, practically all of it having been laid on a cement concrete base under the ties.

Where the streets were paved with brick or wood block, a second concrete base has been provided for the paving.

Of course the restoration of paving which was disturbed by these track changes was done by our skilled departmental labor, and wholly at the expense of the Railway Company.

This type of track construction was first adopted in the year 1907, and insures a very superior quality of track work, which should enable the City to maintain so-called permanent paving alongside the rails in a satisfactory condition.

It is needless to state that some of our paving, where such care in track construction has not been taken, is in poor condition.

#### CITY YARD AND TRAP ROCK TRESTLE.

The new City Yard has served to satisfactorily take care of the needs of the Street and Sewer Departments. A wagon shed fronting on Summer street and accommodating about sixteen vehicles has been built during the year.

The cement concrete bin and wooden trestle for handling

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TILDEN FOUNDATIONS.



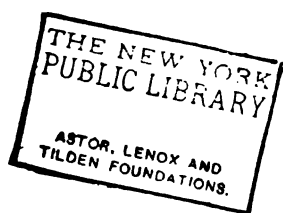
CITY YARD, SUMMER STREET.

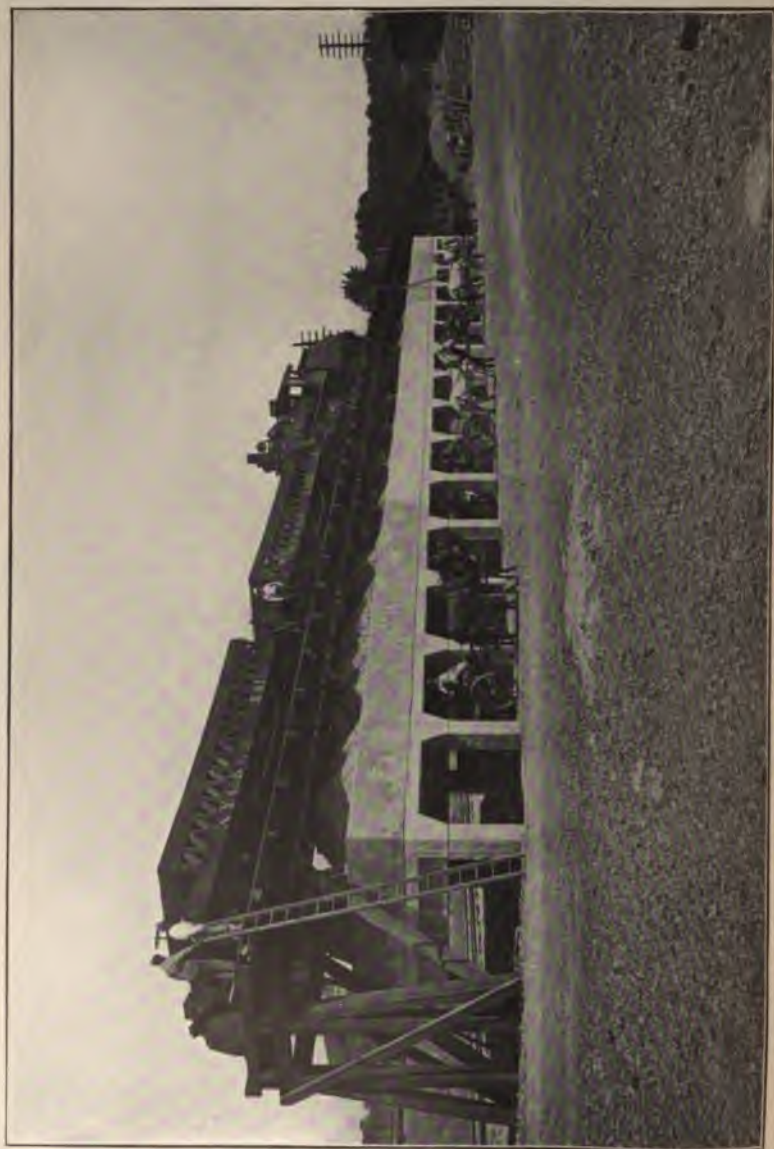
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REINFORCED CONCRETE BINS FOR STORAGE OF TRAP ROCK AND LOADING OF CARTS.  
CITY YARD, SUMMER STREET.





REINFORCED CONCRETE BINS FOR STORAGE OF TRAP ROCK AND LOADING OF CARTS.  
CITY YARD, SUMMER STREET.

trap rock from cars to carts, without shoveling, was put into service on May 28, 1908, since which time about 20,000 tons of rock have been dumped into the bin and drawn directly to carts.

The saving in cost in handling this amount of stone, through this bin instead of dumping it on the ground and then loading the carts by hand, represents no small sum of money. The actual profit is difficult to determine, but it can be stated that probably \$2,000.00 would be a very conservative figure.

ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of Mr. A. H. Woodward, Assistant Superintendent of Streets, and to thank the foremen and men by whose efforts the success attained by the Department during the year is largely measured.

I thank Mayor William E. Sanderson, Alderman Fred R. Brown, and Councilman John H. Curtiss, members of the Board of Supervisors of Highways and Bridges, for the many courtesies which they have extended to me.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*



*Report on Streets.*

BOARD OF ALDERMEN, December 28, 1908.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

---

COMMON COUNCIL, December 28, 1908.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 29, 1908.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1908.

Approved.

W. E. SANDERSON, *Mayor.*

MACADAM REPLACED BY PAVING.

STREET.	Limits.	Length in feet.	Area in sq. yds.
King street,	at R. R. turnout,	317	1,023
Lyman street,	Chestnut easterly,	503	2,095
No. Main street,	turnout at Wason ave.,	—	196
State street,	turnout at Walnut,	—	278
Towneley ave.,		138	214
Worthington st.,	turnout at Sackett place,	265	886
Worthington st.,	turnout between Federal and Ar- mory streets,	374	1,312
		1,597	6,004

PAVING REPLACED BY OTHER PAVING.

GRANITE BLOCKS BY WOOD BLOCKS.

STREET	Limits.	Length in feet.	Area in sq. yds.
State street,	Main to Dwight,	478	2,403

## TABLE OF MACADAMIZED STREETS.

\*Includes Macadam laid by Spfd. Street Ry. Co.

\*\*Macadam laid by Spfd. Street Ry. Co.

†Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Abbe ave. bridge app.,		872	2,325
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
†Agawam street,	Pecousic avenue to South st.,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,330
Allen street,	Mill street, southeasterly,	2,747	*9,565
Allendale street,		663	2,094
Amlherst street,	Harvard to Monmouth street,	1,233	4,069
Andrew street,	State to Dawes street,	1,323	4,228
Arbor street,		437	1,222
Armory street,	Federal to Warwick avenue,	2,305	7,688
Armory street,	Liberty to Carew street,	1,570	5,208
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
†Avon place,		67	386
Bancroft street,		1,435	4,865
Banks place,		225	536
Barnes street,		180	561
Bay street,	St. James avenue to Cam- bridge street,	4,469	*14,363
Beaumont street,	Dickinson to Belmont ave.,	689	2,295
Beech street,		528	1,303
Belmont avenue,	Woodside ave. to Oakland st.,	2,599	7,043
†Belmont avenue,	Oakland st. to Sumner ave., easterly side,		1,905
Belmont avenue,	Sumner avenue to Whitest.,		**3,700
Belmont avenue,	south side Garfield street to Sumner ave.,	1,624	4,170
Berkshire street,	State to Oak, I. O.,		**31,291
Birnie avenue,	Greenwich st. to Wason ave.,	3,369	8,077

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREET.	Limits.	Length in feet.	Area in sq. yds.
Bliss street,	Main to N. Y., N. H. & H. R. R.,	1,229	3,956
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Worth- ington street,	1,152	3,837
Bowles street,	Bay to McKnight street,	750	2,500
Boylston street,		1,807	864
Bradford street,		862	2,935
Bridge street,	Water street 250 feet, and Dwight to Chestnut,	568	2,296
Broad street,		959	3,177
Brookline avenue,		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,407
Catharine street,	Bay to Dartmouth,	150	493
Cedar street,		1,962	6,655
Central street,		4,903	12,832
Central street,	Cedar to Mill,		**2,705
+Chapin terrace,	Chestnut street to Marvin,	601	3,112
Charles street,	Liberty to Franklin,	618	1,888
Chase avenue,		583	1,943
Chestnut street,	State to Worthington, and east side, Jefferson ave. to Springfield street,	3,164	7,846
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clark street,		619	1,100
Clarendon street,	Bay to 200 feet north of Worthington,	1,452	4,834
Clinton street,		703	1,842
College street,		527	1,522

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet	Area in sq. yds.
Congress street,		1,550	3,918
Court street,	Water to Court Square ave.,	689	2,052
Cross street,	Willow to Maple,	608	1,416
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliott street,		1,007	3,342
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818	2,089
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Euclid ave.,		1,169	3,896
Everett street,		1,500	4,859
Farnsworth street,	width of 20 feet,	513	1,710
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,		1,682	6,240
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,668
Forest street,		784	2,502
Forest Park avenue,	Sumner ave. to Forest street,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475
Fort Pleasant avenue,	west side,	2,794	10,138
Franklin street,	Main to Webster street,	3,613	12,386
Franklin street,	Webster to Genesee, width of 20 feet,	1,139	3,797
Fremont street,		778	2,583

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Fulton street,	Plainfield to Vine,	2,444	8,087
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
Genesee street,	width of 20 feet,	276	821
George street,	Maple easterly,	110	647
Grace street,		354	885
Grant street,		577	1,603
Gray's avenue,		560	1,300
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hamburg street,	width of 20 feet,	574	1,786
Hancock street,	Florence to State,	3,429	*11,613
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorn street,		540	1,374
Hebron street,		698	2,204
Heywood street,	Liberty to Warwick ave.,	250	833
Hickory street,	Walnut to Sheffield st., and Alden street easterly,	3,341	8,547
High street,		2,563	5,544
Holyoke street,		776	2,001
Homer street,		582	1,940
Howard street,	N. Y., N. H. & H. R. R. to Main st.,	1,277	4,326
Hubbard avenue,		568	1,063
Huntington street,		643	†2,143
Ingraham avenue,		258	462
Jackson street,	Sumner avenue to Maple- wood terrace,	283	943
James street,		928	2,356
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Kenwood park,		721	3,888
Kibbe avenue,		213	710
King street,	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,568	*8,484

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Lafayette street,		568	1,866
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,659
Leyfred terrace,		625	2,103
Liberty street,	Main street easterly, and Walcott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chicopee line,		**9,920
Lillian street,		387	989
Linden street,		1,287	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Longhill street,	Sumner ave. to Warner place,	475	2,321
Loring street,		707	2,294
Lyman street,	Spring street, westerly,	231	449
Madison avenue,		529	1,637
Magazine street,	Lincoln to Armory,	734	2,494
Magnolia terrace,	Sumner ave. to Spruceland ave.,	585	3,120
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Front street to Parker street,	5,563	19,691
Main street, I. O.,	Front st. to Ludlow bridge,		**11,137
Maple street,	top of hill to George street,	1,565	4,572
Mapledell street,		972	3,239
Maplewood terrace,	south side, Fort Pleasant ave. to Forest Park avenue,	1,301	3,075
Maplewood terrace,	north side, Forest Park ave. to Riverview terrace,		1,574
Marble street,		1,074	3,508
Margaret street,	Water to Main,	842	2,807
†Marvin street,	Pratt st. to Chapin terrace,	430	1,440
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
McKnight street,	Sherman to Bowles street,	532	1,773
Medford street,	N. Main st. to Birnie ave.,	624	2,099
Merwin street,		713	2,377

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Mill street,	Main to Dickinson,	3,250	13,564
Monroe street,	Hancock to Eastern avenue,	1,345	3,736
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mulberry street,	Maple to Ridgewood place,	991	3,256
Murray Hill avenue,		600	2,000
Myrtle street,		484	997
North street,	Carew to Waverly,	2,988	10,807
North Main street,	Morgan to Chicopee line.	6,285	32,484
Norwood street,		1,117	2,911
Oak street,		1,344	4,136
Oak street, I. O.,	Berkshire to Water street,	1,457	5,731
Oak street, I. O.,	Berkshire to Main,		**2,078
Oakland street,	Allen to Sumner avenue,	4,153	14,808
Olive street,		478	1,248
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow, and foot of hill to Maple,	865	2,545
Parkwood street,		450	1,500
Patton street,		1,631	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	South street to South street,	2,205	7,350
Pecousic avenue,	Main st. to Mill river bridge, width of 20 feet,	350	972
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344
Plainfield street,	B. & M. R. R. to Newland street, and Rowland ave. to Wason avenue,	3,079	8,646
Plainfield street,	Rowland ave. southerly,	805	1,970
Plainfield street,	Washburn to Wason ave.,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597



TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
White street,	Allen to southerly line school-house property,	3,362	8,711
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham road,	State to Homer street,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton street,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water street,	1,307	4,000
William street,	N. Y., N. H. & H. R. R. to Main,	1,368	4,330
Willow street,	Union to State,	895	2,498
Winthrop street,		659	2,397
Woodside terrace,	Belmont to Forest Park ave.,	463	1,543
Worcester street, I. O.,	Pine to Fiberloid Co.'s driveway, 18 ft. in width,	4,994	10,988
Worthington street,	Water to Cook's ave.,	309	1,030
Worthington street,	Spring st. easterly,	1,259	4,197
Worthington street,	Sackett's pl. to Federal street,	1,121	2,861
Worthington street,	Armory st. to St. James ave.,	2,514	7,961
Yale street,	Dartmouth to Monmouth,	1,493	5,142
York street,		1,000	2,997
Total,	63.514 miles.	385,355	1,167,644

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year laid.
Belmont avenue,	Hall street westerly,	Catskill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	483	1906
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1905
Bridge street,	Water street to Old Toll bridge,	Granite blocks,	249	713	1907
Catharine street,	State to Bay	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.,	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Carew,	Granite blocks,	773	2,156	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson ave.,	Bitulithic,	825	2,898	1905
Court street,	Main to Court Square ave.,	{ Rock asphalt, Syracuse brick,	317	1,149	1897
		{ Syracuse brick,	—	174	1897
		{ Rock asphalt,	—	128	1907
Court square avenue,	Court to Elm st.,	{ Rock asphalt, Syracuse brick,	193	503	1897
		{ Syracuse brick,	—	330	1897
Cypress street,	Main street westerly,	Granite blocks,	459	1,700	1904

TABLE OF PAVED STREETS.

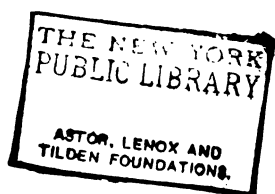
Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	crossing opposite Auburn street,	Catakill and Metropolitan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison ave.,	Bitulithic,	968	1,887	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
North Main street,	at Wason ave.,	Syracuse brick,	—	196	1908
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,219	1902
Railroad street,	Main to Water,	Granite blocks,	516	1,539	1906
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main to Dwight,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	478	2,403	1908
State street,	Dwight to City Library,	Granite blocks,	541	1,631	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	at Walnut,	Syracuse brick,	—	278	1908
State street,	at St. James avenue,	Syracuse brick,	—	188	1907
State street,	Sherman to Highland Div., N. Y., N. H. & H. R. R.,	Bitulithic,	320	4,362	1905
Summer street,	Spring to near Autumn,	Granite blocks,	567	1,512	1907
Summer street,	Autumn to Kibbe ave.,	Granite blocks,	1,359	4,029	1895

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area, in sq. yds.	Year Laid.
Summer street,	Kibbe avenue to point 85' west of Federal,	Granite blocks,	787	2,635	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Townslay avenue,		Bitulithic,	142	214	1908
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton ave.,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave. to Lebanon st.,	Bitulithic,	1,195	3,888	1905
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,334	1906
White street,	Allen to Orange,	Bitulithic,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Cook's ave.,	Bitulithic,	404	1,418	1905
Worthington street,	at Sackett place,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	265	886	1908
Worthington street,	Federal to Armory,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	374	1,312	1908
Total,			54,571	204,911	

## RECAPITULATION.

Material.	Length in feet.	Length in miles.	Area in sq. yds.	Material.	Length in feet.	Length in miles.	Area in sq. yds.
Bitulithic,	10,762	2.038	39,382	Metropolitan blocks,	1,028	.194	996
Catskill blocks,	2,809	.532	6,741	Rock asphalt,	1,700	.333	5,680
Creo-resinate wood blocks,	6,464	1.224	34,307	Syracuse brick,	19,534	3.7	77,920
Granite blocks,	11,488	2.176	37,205	Trinidad asphalt,	586	.111	2,247
Johnsonburg blocks,	145	.027	483				
<b>Total,</b>					<b>54,571</b>	<b>10.385</b>	<b>204,911</b>





STEEL FORMS FOR INVERT, UNION STREET CONCRETE SEWER.

# FORTIETH ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 26, 1908.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 1, 1908.

### RECEIPTS.

#### SEWERS AND DRAINS.

By regular appropriation, . . . . .	\$25,000 00
Sewer entrances, { fees, . . . . .	12,635 81
{ building private drains, . . . . .	5,199 25
From departments and private parties, bills rendered, . . . . .	1,386 67
	\$44,161 73
From Special Account for building Ferry, Union, and State street sewers, . . . .	38,692 99
	\$82,854 72
By special appropriation for building Pe-cousic avenue, Main, Longhill, Carew, and Armory street sewers, . . . . .	5,685 63
Gross receipts, . . . . .	\$88,540 35

### EXPENDITURES.

Building private drains, . . . . .	\$4,151 21
City teams, uncredited balance, . . . .	251 08
City yard, . . . . .	1,169 68
	\$5,571 97
Amount carried forward,	



*Report on Sewers.*

Amount brought forward,	\$5,571 97	
Engineering, . . . . .	868 72	
Office and general expenses, . . . . .	948 19	
Salary of first assistant superintendent, . . . . .	1,500 00	
Sewers, { cleaning, . . . . .	1,525 28	
{ construction, . . . . .	60,384 05	
{ flushing, . . . . .	2,220 32	
{ repairs, . . . . .	1,844 87	
Supplies, . . . . .	336 21	
Tools, . . . . .	1,128 62	
Foremen's winter and holiday pay, . . . . .	49 63	
Work and material charged to departments and private parties, . . . . .	1,357 47	
Work and material furnished by order of Board of Health, chargeable to City and various individuals, . . . . .	785 76	
Refunds on account of fees for sewer entrances, . . . . .	327 00	
Refunds—unexpended balances on deposits for building private drains, . . . . .	212 92	
Transferred to Maintenance Account, . . . . .	3,000 00	
	<u>\$81,556 01</u>	
Credit by material used 1908, and paid for 1909, . . . . .	1,205 60	
	<u>\$80,350 41</u>	
Unexpended balance, . . . . .	2,504 31	\$82,854 1
For completion of Pecousic avenue, Longhill, Carew, and Armory street sewers, . . . . .	\$1,697 20	
Unexpended balance, . . . . .	3,988 43	
	<u>5,685 6</u>	\$88,540 1

**BILLS RECEIVABLE.**

Bills receivable, November 30, 1907, . . . . .	\$512 29	
Bills committed, fiscal year 1908, . . . . .	58,859 32	
	<u>\$58,871 6</u>	
Bills paid, fiscal year 1908, . . . . .	\$57,854 72	
Abatements, . . . . .	306 75	
	<u>58,161 4</u>	
Bills receivable, November 30, 1908, . . . . .		\$710 1

SEWER CONSTRUCTION CLASSIFIED.

VITRIFIED CLAY PIPE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
8"	246'		246'
10"	6,542'	315'	6,857'
12"	7,139'	116'	7,255'
15"	2,700'	59'	2,759'
18"	786'		786'
20"	1,028'		1,028'
24"	447'	437'	884'
Total,	18,888'	927'	19,815'

CONCRETE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
4'-10"x7'-3" elliptical.....		385'	385'
4'-2"x6'-3" " .....	1,085'		1,085'
4'-9" circular.....	1,004'		1,004'
2'-8"x4'-0" egg shape.....	25'		25'
2'-0"x3'-0" " " .....		726'	726'
2'-2" circular.....		306'	306'
2'-0" " .....		1,440'	1,440'
3'-2"x4'-9" elliptical.....		718'	718'
2'-8" circular .....		951'	951'
2'-3" " .....		1,021'	1,021'
Total.....	2,114'	5,547'	7,661'

**SEWER CONSTRUCTION AND RECONSTRUCTION.****DESCRIPTIONS AND COSTS—FISCAL YEAR 1908.**

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Alderman street, extension easterly to Pomona avenue.....	Clay	306	10"	\$232 21
Armory street, Carew street north- erly to Truant School, com- pletion .....	....	....	....	142 61
Armory street, flush gate.....	....	....	....	30 68
Austin street, State street northerly	Clay	363	10"	334 91
Beaumont street, flush gate.....	....	....	....	21 99
Bryant street, Belmont avenue north- erly, incomplete.....	Clay	274 301 175	15" 12" 10" }	576 46
Carew street, Prospect street to Ar- mory street, completion.....	....	....	....	26 37
Carlisle street, Wilbraham Road southerly .....	Clay	400 246	10" 8" }	355 69
Cedar street, I. O., manhole and flush gate.....	....	....	....	65 16
Center street, I. O., Cedar street easterly .....	Clay	400	10"	341 81
Chester street, Mill street northerly	Clay	459 161	12" 10" }	509 11
Clantoy street, extension southerly	Clay	264 241	12" 10" }	434 41
Commonwealth avenue, Washington avenue to Fairview street, in- complete .....	Clay	545	15"	530 68
Continental street, manhole and flush gate .....	....	....	....	49 86

## CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
avenue, Dickinson street ly .....	Clay	362 372	15" } 12" }	\$650 64
et, Conn. river to Ful- reet, rebuilding .....	Con- crete	385	4'-10"x7'-3" } elliptical }	3,890 53
et, Fulton street to Main .....	Con- crete	691	4'-2"x6'-3" } elliptical }	6,144 30
et, flush gate .....		....	....	33 37
et, Birnie avenue easterly, ng .....	Clay	315	10"	388 50
, Smith street northerly	Clay	219	12"	182 12
reet, extension westerly	Clay	249	12"	303 42
Main street easterly ....	Con- crete	394 1,004	4'-2"x6'-3" } elliptical 4'-9" circular }	11,067 29
treet, I. O., manhole..		....	....	16 43
et, manhole .....		....	....	31 05
I. O., Hampden street, erly .....	Clay	175	12"	117 69
street, Commonwealth e easterly .....	Clay	211 241	12" } 10" }	445 87
e, State street northerly	Clay	350 313	12" } 10" }	602 72
avenue, extension east- o Earl street .....	Clay	131 402	18" } 15" }	685 85
trace, flush gate .....		....	....	29 45
drainage only.				

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
*Kibbe Hollow, northerly of Worthington street.....	Clay	447	24"	....
Knox street, Mill River to Smith street relaying.....	Clay	487	24"	\$1,144 10
Longfellow terrace, White street westerly .....	Clay	246 200	12" 10" }	390 08
Longhill street, Main street southerly, completion.....	Clay	116 400 240	15" 12" 10" }	1,309 98
Lyndale street, Belmont avenue northerly.....	Clay	350 300 324	15" 12" 10" }	953 60
Margaret street, manholes.....	....	....	....	88 00
Marion street, manholes.....	....	....	....	67 28
Marvin street, Pratt street southerly	Clay	149	10"	218 00
Mason place, Dickinson street southerly. ....	Clay	200 276	12" 10" }	433 02
Melrose street, extension westerly to Walnut street.....	Clay	201	10"	231 43
Mooreland avenue, Carew street to Van Horn avenue.....	Clay	601 301 299 212	18" 15" 12" 10" }	1,467 66
Nelson avenue, extension northerly to King street.....	Clay	67	10"	93 63
Norfolk street, extension southerly	Clay	229	10"	155 85
Oakland street, flush gate.....	....	....	....	22 16
Pecousic avenue, Mill River to Main street, completion.....	Concrete	25	2'-8"x4'-0" egg shape }	93 33

\*Surface drainage only. Chargeable to City and various individuals.

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Pratt street, Chestnut street to Marvin street.....	Clay	350 299	15" } 12" }	\$869 53
Ranney street, Wilmont street northerly .....	Clay	200	10"	151 76
Reed street, flush gate.....		....	....	24 34
Riverview street, Riverview terrace to Chase avenue.....	Clay	310	10"	354 50
Searle place, Walnut street easterly	Clay	178	10"	231 61
Seventh street, manhole.....		....	....	38 97
Smith street, Dorne street easterly, relaying.....	Clay	34	12"	48 55
Sorrento avenue, Sumner avenue northerly.....	Clay	325	12"	271 15
State street, extension easterly to Alden Warner's.....	Clay	1852	12"	2,281 65
State street, easterly from High School to Walnut street rebuilding...	Concrete	726 306 1440	2'-0"x3'-0" } egg shape 2'-2" } circular 2'-0" } circular 18" }	6,437 39
Stearns square, easterly roadway, Worthington street southerly	Clay	54 148	12"	342 98
Suffolk street, extension southerly	Clay	300 795	12" } 10" }	565 35
Sumner terrace, Sumner avenue northerly .....	Clay	252 220	12" } 10" }	440 44

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Union street, Main street to Ingraham avenue, rebuilding incomplete.....	Concrete	718 951 1021	3'-2"x4'-9" elliptical 2'-8" circular 2'-3" circular	\$13,447 59
Ventura street, Grenada terrace northerly.....	Clay	341	10"	
Warriner avenue, flush gate.....	....	....	....	
Welcome place, flush gate.....	....	....	....	
Westernview street, flush gate.....	....	....	....	28 44
White street, Sumner avenue southerly.....	Clay	1028	20"	1,719 01
Wilcox street, manholes.....	....	....	....	108 86
Winthrop street, relaying.....	Clay	59	15"	132 30
Worcester street, I. O., manhole and flush gate.....	....	....	....	74 25
		27,476		\$62,613 23

NOTE.—The costs of the above described sewers include the costs of manholes and flush gates.

## SEWERS ABANDONED—1908.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Cypress street, Conn. river easterly	Brick	385	3'-4"x5'-0" egg shape }	\$3,580 50
Donald street, Birnie avenue easterly.....	Clay	315	10"	.....
Knox street, Mill river to Smith street.....	Cem.	266 198	15" 12" }	.....
Smith street, Dorne street easterly	Cem.	34	12"	.....
Sorrento avenue, Sumner avenue northerly.....	Clay	82	6"	7 49
State street, High School to Federal street,.....	Brick	1,682	2'-0" cir.	2,567 48
Near top of hill.....	Cem.	505	18"	708 18
Union street, Main street easterly.	Brick	414 302 1,148 848	3'-4"x5'-0" 2'-6"x3'-6" 2'-0"x3'-0" 1'-8"x2'-6" }	12,665 04
Winthrop street.....	Stone	59	2'-6"x3'-6"	.....
		6,238		\$19,528 69

## SUMMARY.

DESCRIPTION.	Length in Feet.	Cost.
Concrete sewers built by special appropriation.....	7,661	\$41,080 43
Clay pipe sewers built by regular appropriation .....	18,558	19,286 82
Clay pipe sewers built by special appropriation.....	810	1,478 91
Flush gates and manholes built by regular appropriation.....		767 07
	27,029	\$62,613 23
Clay pipe sewer built at expense of City and various individuals .....	447	
	27,476	\$62,613 23
Sewers abandoned.....	6,238	19,528 69
Net addition to sewer system.....	21,238	\$43,084 54



**SEWER CLEANING AND REPAIRS.**

	COST OF	
	Cleaning.	Repairs.
Armory street, . . . . .		\$ 4 15
Belmont avenue, . . . . .	\$87 04	93 56
Birnie avenue, . . . . .		379 02
Bridge street, . . . . .		13 21
Calhoun street, . . . . .		13 83
Carew street, . . . . .	25 89	9 50
Cedar street, I. O., . . . . .	9 91	1 87
Chapel street, . . . . .		10 46
Churchill street, . . . . .		21 25
Clinton street, submerged outlet, . . . . .	18 81	
Dickinson street, . . . . .	176 93	
Elm street, submerged outlet, . . . . .	15 83	
Ferry street, . . . . .	68 25	
Fisk avenue, . . . . .		147 52
Fort Pleasant avenue, . . . . .	4 54	12 09
Garden Brook, . . . . .	354 99	
Gray's avenue, . . . . .	11 88	7 32
Hampshire street, I. O., . . . . .	55 75	
Harvard street, . . . . .	12 09	4 73
Ingersoll Grove street, . . . . .		20 92
King street, . . . . .	16 01	
Lowell street, . . . . .	27 71	
Main street, . . . . .	229 37	7 25
Main street, I. O., . . . . .	45 37	24 16
Manhattan street, . . . . .	19 92	
Margaret street, . . . . .		22 55
Mattoon street, . . . . .		19 33
Mulberry street, . . . . .	26 47	8 58
Plainfield street, . . . . .		30 10
Quincy street, . . . . .	12 10	
Reed street, . . . . .	12 54	
Sewer connections, . . . . .		87 68
Summer street, . . . . .		11 08
Sundry sewers, costing less than \$10.00, . . . . .	97 17	233 62

SEWER CLEANING AND REPAIRS.—CONTINUED.

	COST OF	
	Cleaning.	Repairs.
State street, . . . . .	\$46 45	
Sumner avenue, . . . . .		\$24 45
Talcott avenue, . . . . .		24 50
Union street, . . . . .	63 59	21 60
Water street, . . . . .		20 98
Willow street, . . . . .	13 50	18 76
Worcester street, I. O., . . . . .	50 48	
Worthington street, . . . . .		50 75
Worthington street, submerged outlet, . . . . .	22 69	
	\$1,525 28	\$1,344 87

GENERAL DESCRIPTIONS.

Sewer construction amounting to 19,815 feet of pipe and 7,661 feet of concrete, at a total cost of \$62,613.23, has been done by departmental labor during the year. This quantity is greatly in excess of that done in any previous year in the history of the department.

It was made possible by a regular appropriation of \$25,000.00 for general work and a bond issue amounting to \$51,000.00, to enable the construction of sewers in Cypress, Ferry, State, and Union streets.

The Union street sewer is the only one of the sewers built by issue of bonds, remaining unfinished at the close of the year. This work was carried easterly to Ingraham avenue, where, on account of the lateness of the season, it was deemed advisable to stop. The part between Ingraham avenue and Oak street will be completed during the coming year.

ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of Mr. Howard O. Buck, Assistant Superintendent of Sewers,

and to thank the foremen and men by whose efforts the success attained by the department during the year is largely measured.

I thank Aldermen Henry N. Bowman, Fred R. Brown, and Nelson L. Elmer, members of the Committee on Sewers and Drains, for the many courtesies which they have extended to me.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

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BOARD OF ALDERMEN, December 28, 1908.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 28, 1908

Read and concurred.

H. S. GILBERT, *Clerk.*

Presented to the Mayor for approval, December 29, 1908.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1908.

Approved.

W. E. SANDERSON, *Mayor.*

# CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO DECEMBER 1, 1908.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
ave., Fisk ave., westerly	301	15"	Clay	\$497.38
	275	12"	Clay	
field st., westerly.....	300	18"	Clay	1,405.16.
	300	15"	Clay	
	301	12"	Clay	
	200	10"	Clay	
met ave., Main street, sterly .....	294	20"	Clay	298.94
	279	18"	Clay	
	271	15"	Clay	
	26	12"	Clay	
is st., Main st. to Town ook .....	64	18"	Cem.	322.22
	86	18"	Clay	
n brook, easterly.....	890	....	Brick	66.68
elieu st., westerly.....	237	12"	Clay	304.12
st., Hancock to East- n ave .....	595	18"	Cem.	693.02
	820	15"	Cem.	
ern ave. to Wilbraham re.....	895	15"	Clay	911.39
braham ave. to Hickory st.	499	10"	Clay	250.86
				2,808.38
man st., Dickinson st. Scott st.....	296	18"	Clay	1,148.99
	304	15"	Clay	
	300	12"	Clay	
	443	10"	Clay	
nder st., North street, sterly .....	288	10"	Clay	188.48
i st., Birnie ave., easterly	377	10"	Clay	.....
ave., Allen st., easterly	338	10"	Clay	232.73
st., Mill river to Oak- nd st.....	216	24"	Clay	576.86
st. to Oakland st.....	365	10"	Clay	447.19
land st. to Plumtree rd..	686	24"	Clay	1,832.06
	383	18"	Clay	1,598.59
	474	15"	Clay	
	580	12"	Clay	
	1,603	12"	Clay	
	1,401	10"	Clay	881.58
				984.62
				6,320.90
dale st., North st., east- ly .....	272	12"	Clay	401.43
	340	10"	Clay	
on st., State st., south- ly .....	349	10"	Clay	222.90

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Amherst st., Harvard street, northerly .....	441	12"	Cem.	\$146.99
	25	10"	Clay	23.78
Princeton to Monmouth st..	512	12"	Clay	632.90
	191	10"	Clay	
				<hr/> \$793.67
Andrew st., State st., north- erly .....	463	20"	Clay	1,753.67
	422	18"	Clay	
	382	12"	Clay	
Arbor st., Butler to Carew st.	398	12"	Clay	318.05
Arch st. (see Garden brook)				
Armory Hill Sewer (see pri- vate ways).				
Armory st., Worthington st., southerly .....	570	15"	Cem.	658.06
Summer st., southerly .....	374	12"	Clay	384.78
	325	10"	Clay	198.87
B. & A R. R. to Liberty st.	690	15"	Clay	1,165.47
	360	12"	Clay	
	271	10"	Clay	
Liberty to Sullivan st. ....	450	1'-10" x 2'-9"	Brick	2,439.42
	476	1'-8" x 2'-6"	Brick	
Sullivan to Carew st. ....	156	24"	Clay	1,006.45
	267	20"	Clay	
	290	12"	Clay	
Carew st., northerly .....	452	20"	Clay	1,209.52
	803	10"	Clay	
Springfield st., southerly...	31	20"	Clay	
	146	18"	Clay	317.00
				<hr/> 7,374.57
Ashley st., Cedar st., easterly	65	18"	Cem.	80.45
	580	15"	Cem.	1,555.00
	697	12"	Cem.	
				<hr/> 1,635.45
Atwater Terrace road, Green lane, westerly .....	322	20"	Clay	.....
	199	18"	Clay	
Auburn st., Fulton st., easterly	397	12"	Clay	655.06
	335	10"	Clay	
Austin st., State st., northerly	363	10"	Clay	334.91
Autumn st., Summer to Wor- thington st. ....	239	15"	Clay	715.29
Avon place, Maple st., east- erly .....	695	24"	Clay	3,359.45
Bancroft st., Garden brook to Chestnut st. ....	1,361	3'-4" x 5'-0"	Brick	8,914.04
including Chestnut st., Ban- croft to Montmorenci st..	379	3'-2" x 4'-9"	Brick	
Montmorenci st., Chestnut st., easterly .....	43	3'-2" x 4'-9"	Brick	

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bay st., St. James avenue to Pleasant st.....	250 245 228	15" 12" 10"	Clay Clay Clay	\$715.01
Florida to Pleasant st.....	235	12"	Clay	
Florida to Sherman st.....	304	20"	Clay	
	377 812	18" 15"	Clay Clay	1,092.89
Sherman to Clarendon st. .	151	8"	Cem.	
Catharine to Clarendon st...	194	10"	Clay	200.66
Bowles to Cambridge st....	1,037	2'-8" x 4'-0"	Brick	8,056.62
	360	2'-2" x 3'-3"	Brick	
Cambridge st., easterly....	247	8"	Clay	61.87
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	119.21
Colton st., easterly.....	124	8"	Clay	3.65
				122.86
Beaudry st., I. O., Main st., southerly .....	300 270	12" 10"	Clay Clay	745.95
Beaumont st., Belmont ave., northerly.....	250 431	12" 10"	Clay Clay	
Belmont ave. to Sumner ave.....	264	10"	Clay	183.91
				587.78
Beech st., Central st., north- erly .....	410	10"	Cem.	95.58
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut st., westerly.....	220 140	8" 6"	Clay Clay	....
Bellevue ave., Belmont ave., easterly.....	300 300 194	18" 15" 12"	Clay Clay Clay	
Dickinson st., westerly ....	744	10"	Clay	....
				....
Belmont ave., Fort Pleasant ave., easterly.....	90	10"	Clay	93.92
Mill river to Woodside ter..	954	20"	Clay	2,698.67
Woodside ter. to Litchfield st.	660	2'-0" x 3'-0"	Brick	11,750.19
	445	1'-10" x 2'-9"	Brick	
	595	1'-8" x 2'-6"	Brick	
	550	1'-6" x 2'-3"	Brick	
Litchfield street to Kenwood Park .....	432 493	20" 18"	Clay Clay	1,451.53
Kenwood Park to Sumner ave	301 403	15" 12"	Clay Clay	
	616	10"	Clay	871.69

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
*Sumner ave. to Wood- lawn st. ....	880	3'-4"x5'-0"	Brick	\$8,216.97
	819	3'-0"x4'-6"	Brick	
	245	3'-0"x4'-6"	Brick-	
	416	2'-10"x4'-3"	Con.	
				\$38,553.28
Belmont court, Belmont ave., southerly....	216	10"	Clay	146.76
Benton st., State st., southerly	301	12"	Clay	513.96
	300	10"	Clay	
	247	8"	Clay	
	320	8"	Clay	
Berendo ave., Grenada ter. to Alderman st. ....	345	12"	Clay	953.64
Berkeley st. Princeton to Monmouth st. ....	483	12"	Clay	517.32
Berkshire st. I. O. ....				
Oak to Myrtle st. ....	701	12"	Cem.	946.21
Oak st., easterly. ....	387	12"	Clay	289.89
Chestnut st. to Myrtle st ...	577	12"	Clay	545.74
				1,881.84
Besse place, Main st., west- erly .....	290	10"	Clay	....
Birnie avenue, Wason ave- nue, northerly....	362	24"	Clay	579.11
Wason ave., southerly....	350	18"	Clay	1,024.75
	417	15"	Clay	
Worcester street extension, northerly to Grace st. ....	162	15"	Cem.	....
Worcester street extension, southerly to Walter st. ....	144	12"	Cem.	....
Douglas st., northerly. ....	292	24"	Clay	1,149.93
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker st. ....	373	1'-10"x2'-9"	Brick	1,319.73
	312	20"	Clay	768.74
	316	18"	Clay	
	168	15"	Clay	158.56
Arch to Hooker st. ....	1,048	24"	Clay	....
Bliss st., from Main to N. Y., N. H. & H. R. R. ....	1,284	12"	Cem.	5,000.82
Bloomfield st., Oakland st., easterly. ....	500	18"	Clay	1,287.86
	361	15"	Clay	
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) ....	203	12"	Cem.	....

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
1st., Garden Brook sewer to Chestnut st.....	341 959	2'-0" x 3'-0" 24"	Brick Clay	\$1,580.25 2,195.84 ————— \$3,776.09
Join st., Worthington st., southerly .....	660 285	15" 12"	Cem. Clay	762.11 371.52
Worthington to Ingersoll gr..	819	12"	Cem.	758.64 ————— 1,892.27
Les st., Bay to McKnight use st., northerly.....	752 275	15" 8"	Cem. Clay	1,058.67 35.77 ————— 1,094.44
Ston st., Cypress to Clin- on street.....	610 346	18" 15"	Cem. } Cem. }	1,638.72
Se st., Belmont avenue, northerly .....	137	10"	Clay	....
Ford st., North Main to Tulton st.....	352 758	15" 12"	Cem. } Cem. }	1,301.99
Ge st., Main st. to Conn. iver .....	798 275	12" 15"	Cem. Clay	718.79 429.14
In to Chestnut st.....	1,158	2'-0" x 3'-0"	Brick	5,414.20 ————— 6,562.13
D st., Hanover to Main st Kline avenue, North st., easterly .....	970 328 171	15" 12" 10"	Cem. } Clay } Clay }	29.57
N st., Yale to Bay st....	483 21	10" 8"	Cem. } Cem. }	357.65
Nt st., Belmont ave., therly .....	274 301 175	15" 12" 10"	Clay } Clay } Clay }	576.46
Ingham place, Bay st., easterly .....	235	10"	Clay	168.97
Ingham st., Bay to Clar- ndon st.....	651 35	12" 12"	Clay } Cem. }	597.24
St., southerly .....	305	18"	Clay	1,158.40
Se to Bay st.....	345 675	15" 12"	Clay } Clay }	1,755.64
St., Andrew st., easterly.	570	12"	Clay	428.83
St., Chestnut to Cass st.	1,268	20"	Clay	2,021.96
St., easterly.....	321	20"	Clay	520.71 ————— 2,542.67



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Calhoun st., North Main t.				
North st. ....	853	12"	Clay	\$631.40
North st., easterly.....	300	8"	Clay	227.19
				<hr/> \$858.59
Cambridge street, Bay street southerly.....	276	20"	Clay	1,100.88
	331	18"	Clay	
	266	15"	Clay	
	302	12"	Clay	
	278	10"	Clay	411.63
				<hr/> 1,512.51
Card-factory pond (see pri- vate ways).				
*Carew st., Main st. to Gar- den brook (cost shown un- der Clinton st.) .....	250	4'-6"x6'-9"	Brick	....
	32	5'-0" cir.	Brick	....
Garden brook to Prospect st.	1,456	4'-3" cir.	Brick	21,913.22
	1,257	3'-0" cir.	Brick	
	791	2'-8" cir.	Brick	
	580	18"	Cem.	
Massasoit street, easterly...	200	12"	Cem.	671.51
	989	2'-8" cir.	Con.	153.28
Prospect st. to Armory.....	1,365	2'-6"x3'-9"	Con.	8,513.49
	1,101	10"	Clay	
Armory st., easterly.....	448	8"	Clay	
	502	15"	Clay	
Liberty st., easterly.....	499	12"	Clay	2,289.14
	434	10"	Clay	
Carlisle st., Wilbraham road. southerly.....	400	10"	Clay	<hr/> 33,540.64
	246	8"	Clay	355.69
Cass st. Liberty to Franklin st.	500	12"	Clay	457.99
	163	10"	Clay	
Linden st., southerly.....	596	15"	Clay	
Linden st., northerly.....	224	12"	Clay	
				<hr/> 1,350.06
Catharine st., Dartmouth to McKnight st. ....	833	2'-0"x3'-0"	Brick	4,428.92
State st. to McKnight st.,	348	15"	Clay	1,348.95
	438	12"	Clay	
	333	10"	Clay	
				<hr/> 5,777.87
Cedar st., Pine to Walnut st.	180	3'-10"x5'-9"	Brick	889.35
	1,074	3'-8"x5'-6"	Brick	6,206.73
Pine st., westerly .....	378	12"	Cem.	288.32
				<hr/> 7,384.40

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cedar st., I. O., Main st. to river .....	433	2'-0" x 3'-0"	Brick	\$2,001.44
Main st. to Center st. ....	274	12"	Clay	263.92
Cemetery brook (see private ways).				<u>\$2,265.36</u>
Center st. I. O., Oak to Pine st.	463	12"	Cem.	510.73
Pine to Cedar st. ....	349	12"	Clay }	668.19
	300	10"	Clay }	
Cedar st., easterly. ....	400	10"	Clay	341.81
				<u>1,520.73</u>
Central st., Main st., easterly	99	15"	Cem.	147.60
	546	12"	Cem.	385.49
Main to near Maple st. ....	527	2'-0" x 3'-0"	Brick }	2,275.08
	700	1'-8" x 2'-6"	Brick }	
near Maple street to Sterns terrace .....	769	18"	Clay	1,211.88
	105	12"	Clay	199.95
Sterns terrace to Cedar st. ...	334	18"	Cem.	102.50
Pine st., westerly. ....	500	12"	Cem.	568.42
Pine to Spruce st. ....	339	12"	Cem.	376.00
	335	12"	Clay }	514.05
	310	10"	Clay }	
Spruce to Hancock st. ....	861	20"	Clay	1,344.35
Hancock st. to Mill st. ....	597	2'-0" x 3'-0"	Brick	2,135.31
Mill st. to Mill river. ....	40	24"	Clay	136.83
Central st. place, Knox to Central st. ....	279	10"	Cem.	197.64
	285	12"	Cem.	44.07
				<u>241.71</u>
Chapel street, Eastern ave- nue, easterly. ....	400	10"	Clay	208.13
Chapin terrace, Chestnut st., easterly. ....	327	15"	Clay }	1,124.82
	279	12"	Clay }	
Chase ave. Fort Pleasant ave., easterly. ....	238	12"	Clay }	24.49
	333	10"	Clay }	
Charles st., Liberty to Frank- lin. ....	27	12"	Clay }	576.40
	620	12"	Cem. }	
Liberty st., southerly. ....	29	12"	Clay	12.94
Charter ave., Walnut street. easterly. ....	527	12"	Clay	<u>589.34</u>
				475.20
Cherrellyn ave., Phoenix ave., southerly. ....	300	15"	Clay	410.63
Cherry lane, Mill river to Cen- tral street. ....	398	18"	Clay }	1,454.15
	434	15"	Clay }	
	251	12"	Clay }	
	295	10"	Clay }	

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Cherryvale ave., Longhill st. to Florentine gardens.	596	10"	Clay	\$15.74
hester st., Mill st., northerly	459	12"	Clay	\$500.11
	161	10"	Clay	
	112	8"	Clay	
Chestnut st., Edwards street, southerly.....	575	12"	Cem.	579.02
Mattoon st., southerly.....	288	15"	Cem.	319.69
Pearl to Mattoon st.....	313	1'-4" x 2'-0"	Brick	445.40
Pearl to Bridge st.....	143	1'-8" x 2'-6"	Brick	590.51
Bridge to Worthington st..	480	2'-0" cir.	Brick	....
Worthington to Taylor st...	60	18"	Cem.	391.17
	244	12"	Cem.	
	184	12"	Cem.	
	72	12"	Cem.	
Lyman st. to B. & A. R. R..	184	12"	Cem.	355.41
Franklin st., southerly.....	500	12"	Cem.	558.75
Franklin st., northerly.....	397	12"	Cem.	294.14
Essex to Everett st.....	374	15"	Cem.	566.72
Carew st., southerly .....	126	8"	Clay	100.96
Carew to Prospect st.....	424	24"	Clay	1,618.64
	587	20"	Clay	
	220	12"	Cem.	
	172	12"	Cem.	
Prospect st., northerly.....	108	12"	Clay	123.00
Bancroft st., southerly ....	19	10"	Clay	190.55
	391	15"	Cem.	535.24
Bancroft to Montmorenci st.				
Bancroft st. to Montmorenci st. (see Bancroft st.).....	....	3'-2" x 4'-9"	Brick	....
Montmorenci to Waverly st.	185	12"	Cem.	252.32
	717	12"	Clay	807.01
Douglas st., southerly.....	450	10"	Clay	385.61
Douglas to Springfield (see Springfield st.).....	....	3'-6" cir.	Brick	....
Merwin st., southerly ....	178	10"	Clay	....
Eagle st., northerly.....	87	15"	Clay	....
Eagle st., southerly.....	171	10"	Clay	....
				8,081.65
Chestnut st. I. O., Worcester to Hampden st.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st...	307	15"	Clay	342.65
Church st., Garden brook to North st .....	556	18"	Clay	1,396.71
	80	15"	Cem.	157.23
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	84.12
	55	8"	Clay	6.89
				91.01

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Clantoy st., Phoenix avenue to Dupont st.....</b>	398 517 915	15" 12" 10"	Clay Clay Clay }	\$1,130.95
<b>Clarendon st., Worthington st., westerly.....</b>	205	10"	Clay	\$225.80
<b>Worthington to St. James ave.</b>	336	18"	Cem. }	
<b>St. James ave. to Sherman st.</b>	280 605	15" 12"	Clay Clay }	1,859.31
<b>Clark st., Hancock st., west- erly .....</b>	520	10"	Clay	2,085.11
<b>Cleveland street, Armory to Liberty st.....</b>	274 250 276 284	18" 15" 12" 10"	Clay Clay Clay Clay }	531.80
<b>Clifford st., Bay st., northerly</b>	250 119	12" 10"	Clay Clay }	319.95
<b>Clifton avenue, Central street, southerly .....</b>	406	8"	Clay	82.10
<b>Cliftwood ave., Sumner ave., southerly .....</b>	464	10"	Clay	....
<b>Clinton st., Boylston st., easterly .....</b>	410	12"	Cem.	441.52
<b>submerged outlet .....</b>	176 24	24" 24"	Wood C.I.r'n }	2,207.90
<b>Conn. river to Fulton st....</b>	593	4'-10" x 7'-3"	Brick }	26,137.87
<b>Fulton st., Clinton to Sar- geant street.....</b>				
<b>Sargeant st., Fulton to Main street .....</b>				
<b>Carew st., Main st. to Garden brook .....</b>				
<b>(For lengths and sizes see individual streets.)</b>				
<b>College ave. State st. to Shat- tuck ave.....</b>	839	12"	Clay	139.62
<b>Shattuck ave., northerly....</b>	175	12"	Clay	37.94
<b>College st. State st. to Wilbra- ham road .....</b>	34 443	12" 10"	Clay Clay }	177.56 349.92
<b>Collins st., Eastern avenue to Logan st.....</b>	300 269	12" 10"	Clay Clay }	457.04
<b>Colonial avenue, State street, southerly .....</b>	326 348	12" 10"	Clay Clay }	25.65

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Colton st. Wilbraham road to Beacon st. ....	448	18"	Clay	\$1,892.83
	569	15"	Clay	
	658	12"	Clay	
Columbia terrace Liberty st., north and east .....	498	10"	Clay	....
Commonwealth ave., Bel- mont ave. to Washington ave. ....	441	24"	Clay	\$2,878.00
	500	20"	Clay	
	549	18"	Clay	
Washington ave. to Fairview st. ....	545	15"	Clay	530.68
				3,408.68
Congress st., Garden brook to Main st. ....	53	12"	Cem.	75.46
	319	12"	Clay	705.44
Garden brook to Chestnut st.	133	20"	Clay	1,463.00
	198	18"	Clay	
	369	15"	Clay	
	288	12"	Clay	
	119	15"	Cem.	
	76	10"	Cem.	277.22
				2,521.12
Continental st., Sumner ave. southerly .....	215	12"	Clay	102.05
	266	10"	Clay	
Cook's ave., Worthington st. to N. Church ave. ....	117	15"	Cem.	573.84
N. Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	Cem.	
Cornell st., Dartmouth terrace to Wellesley st. ....	185	15"	Clay	543.05
	374	12"	Clay	
Wellesley street, easterly...	186	10"	Clay	208.20
Princeton st., westerly. ....	52	10"	Cem.	47.30
	86	8"	Clay	88.04
Princeton st., easterly. ....	181	10"	Cem.	100.72
	120	10"	Clay	149.53
				1,136.84
Cortland street, State street northerly .....	164	15"	Clay	672.01
	621	12"	Clay	
Cottage ave. (see Melrose st.)				
Court st., Water st., easterly.	273	12"	Cem.	226.15
Court Square ave., westerly.	131	12"	Cem.	553.45
Main st. to Court Square ave	200	12"	Cem.	309.67
				1,089.27

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Crosby st. Walnut st. westerly	321	10"	Clay	\$231.38
Cross st., Main to Willow st.	388	18"	Clay	\$878.12
Willow st., easterly . . . . .	363	12"	Cem.	311.56
Crystal ave., Belmont ave., easterly . . . . .	251	15"	Clay	1,189.68
	250	12"	Clay	24.07
	298	10"	Clay	
*Dickinson st., westerly . . . .	362	15"	Clay	650.64
	372	12"	Clay	674.71
Cumberland st. Chestnut st. westerly . . . . .	167	10"	Clay	125.29
North Main st., easterly . . . .	147	15"	Clay	182.77
Cypress st., Conn. river to Garden brook in Ferry street . . . . .	1,081	3'-4" x 5'-0"	Brick	10,048.85
†Connecticut river to Fulton street . . . . .	385	4'-10" x 7'-3"	Con.	3,890.53
†Fulton st., to Main st., . . . .	691	4'-2" x 6'-3"	Con.	6,144.30
Cypress ave., Cypress street. northerly . . . . .	360	12"	Cem.	20,083.68
Dale st., northerly from sewer 60 ft. south of Hubbard ave . . . . .	203	10"	Clay	157.30
Winthrop st., southerly. . . . .	46	8"	Clay	13.08
				170.38
Dartmouth st. St. James ave. to Yale st. . . . .	973	3'-0" x 4'-6"	Brick	8,247.06
Yale to Bowles st. . . . .	295	2'-6" x 3'-9"	Brick	
Dartmouth ter., Worthing- ton st. to Cornell st. . . . .	499	20"	Clay	2,213.06
	357	18"	Clay	
	177	15"	Clay	
Davis court, Bridge st. to Harrison ave. . . . .	450	12"	Clay	500.67
Dawes st., Bay st., southerly	229	15"	Clay	165.40
	380	12"	Clay	
	518	10"	Clay	
Dawson ave., White street, westerly . . . . .	350	10"	Clay	95.87
Daytona st., Belmont ave. to Sumner ave. . . . .	524	12"	Clay	500.44
Demon avenue Fisk avenue westerly . . . . .	510	12"	Clay	608.57
Plainfield st., easterly . . . .	403	12"	Clay	
Dexter st, Knox to Pine st. . . .	558	12"	Cem.	60.83
	226	10"	Clay	245.10
				305.93

\*Surface drainage only.

†Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Dickinson st. Mill st. to Sum- ner ave.....	35 60 251 679 *460 *869 *1,040 *996	4'-6" cir. 2'-1"x5'-0" 5'-0" cir. 4'-0" cir. 4'-10"x7'-3" 4'-8"x7'-0" 4'-4"x6'-6" 4'-2"x6'-3"	Brick Brick Brick Brick Brick Brick Brick Brick	\$44,552.11
Sumner ave., southerly.....	1,379 324 434 312	2'-6"x3'-9" 2'-4"x3'-6" 2'-0"x3'-0" 1'-10"x2'-9"	Brick Brick Brick Brick	
				8,760.53
				<hr/> \$53,312.64
Donald st., Birnie ave., east- erly.....	315	10"	Clay	406.60
Dorchester st. St. James ave. to Amherst st.....	364 238	12" 10"	Clay Clay	339.50
Dorne st., Smith st., northerly	219	12"	Clay	
Douglas st. B. & M. R. R. to North Main st. (see Row- land ave.).....				....
North Main to Chestnut st..	424 442	4'-6" cir. 4'-0" cir.	Brick Brick	4,805.19
Dresden avenue, State street, southerly.....	359 321	12" 10"	Clay Clay	25.14
*Dwight st., Sanford to State Sanford to Harrison ave....	258 253 229 199	2'-8"x4'-0" 20" 18" 15"	Brick Clay Clay Clay	
Harrison ave., northerly....	100	15"	Cem.	144.41
Hillman st., southerly.....	226	10"	Clay	257.25
Hillman st., northerly.....	103	10"	Clay	388.28
Worthington st., southerly..	269	12"	Clay	433.91
Worthington st., northerly..	342	12"	Cem.	374.73
				<hr/> 4,611.71
Dymon st. Walnut st., easterly	415	12"	Cem.	385.92
Eagle st., North Main to Chestnut st.....	643	15"	Clay	....
East Court st. Dwight street, westerly.....	206 62	12" 10"	Clay Clay	303.10
East Hooker street, North Main st. to North st.....	444 255	10" 10"	Cem. Clay	
				<hr/> 39.04
				39.04

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Eastern ave. Watershop pond to Manhattan st. ....	1,164	24"	Clay	\$2,164.43
Manhattan to Alden st. ....	338	20"	Clay	636.21
Alden to Collins st. ....	231	12"	Clay	313.99
Greene st., southerly. ....	125	8"	Clay	69.58
Greene to Ladd st. ....	38	15"	Clay	27.25
Olive st., southerly. ....	169	8"	Clay	119.57
Lebanon to Olive st. ....	159	12"	Cem.	190.96
Lebanon st., northerly. ....	194	12"	Cem.	331.17
King st. to Chapel st. ....	152	10"	Cem.	166.50
	101	10 "	Clay	149.70
Pendleton ave., northerly. ...	312	12"	Cem.	190.38
Tyler st., northerly. ....	286	12"	Cem.	181.30
Quincy st., northerly. ....	118	10"	Cem.	131.15
Monroe st., southerly. ....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly. ....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
Edwards st., Chestnut street, easterly. ....	551	12"	Cem.	\$5,038.44
Elliott st., Salem st. southerly	610	15"	Cem.	404.88
	243	12"	Cem.	730.48
				309.08
				1,039.56
Elm st., submerged outlet. ....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st. ....	385	3'-9" cir.	Brick }	10,744.19
Water st. to Main st. ....	996	3'-8" x 5'-6"	Brick }	
Elmwood st., Main st. to Hanover st. ....	300	18"	Clay }	12,804.78
	249	15"	Clay }	
	299	12"	Clay }	1,011.08
Emery st., Boylston st., east and west. ....	542	12"	Cem.	616.86
Essex street, Garden brook, westerly. ....	418	15"	Cem.	355.00
Garden brook to Chestnut st.	1,115	2'-2" x 3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
Essex st. I. O., Oak to Myrtle street. ....	254	12"	Clay }	7,815.43
	426	10"	Clay }	662.25
Oak st., easterly. ....	183	10"	Clay	248.23
Euclid ave., Belmont ave. to Dickinson st. ....	389	12"	Clay }	910.48
	741	10"	Clay }	1,102.00
	77	8"	Clay	50.67
*Dickinson st., westerly. ....	350	15"	Clay }	773.10
	350	12"	Clay }	
Dickinson st., easterly. ....	275	10"	Clay	307.83
				2,233.60

\* Surface drainage only.



## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet	Size.	Material.	Cost.
Garfield st. Forest Park ave., easterly .....	556	15"	Clay }	\$967.16
	514	12"	Clay }	
Belmont ave., westerly.....	531	10"	Clay }	
				339.87
				\$1,297.03
Genesee st., Franklin st., southerly .....	200	10"	Clay	234.87
George st., Dexter st., south- erly .....	409	10"	Clay	344.53
Girard ave., Bay st. to Mc- Knight st.....	947	12"	Clay	711.13
Gordon st., Pasadena ave. to White st.....	618	15"	Clay	555.79
Grace st. Birnie ave., easterly	274	15"	Cem.	51.54
Grand ave., Revere st., east- erly .....	250	15"	Clay }	....
	252	12"	Clay }	
Revere st., westerly.....	151	10"	Clay }	
Grant st. Magazine to Armory street.....	588	12"	Cem.	439.38
Granville st., Eastern ave. to Logan st.....	495	12"	Cem.	500.46
Gray's ave., Cypress avenue, northerly .....	495	12"	Cem.	460.32
Greene st. Hancock to East- ern ave.....	610	18"	Cem. }	1,897.69
	793	15"	Cem. }	
Green lane, Rimmon avenue, westerly and northerly...	744	12"	Clay	....
	143	10"	Clay	....
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	133.63
Greenwich st. Birnie avenue, easterly .....	300	12"	Clay }	467.79
	300	10"	Clay }	
Greenwood st. Garden brook to Main st.....	386	12"	Cem. }	2,231.09
Garden brook, easterly.....	538	15"	Clay }	
	113	12"	Clay }	
	452	12"	Cem. }	
Grenada terrace, Dickinson st. to Ventura st.....	220	18"	Clay }	708.45
	310	15"	Clay }	
Ventura st., easterly.....	309	12"	Clay }	397.36
	216	10"	Clay }	
Grosvenor st., North to Chestnut street.....	131	18"	Cem. }	1,105.73
	648	15"	Cem. }	696.55

## SEWER CONSTRUCTION.—CONTINUED.

END OF SEWER.	Length in Feet.	Size.	Material.	Cost.
North Main street.				
ly. ....	409	10"	Clay }	\$442.65
., westerly. ....	270	10"	Clay }	
street, Armory street				
erty st. ....	300	18"	Clay }	910.58
	303	15"	Clay }	
	298	12"	Clay }	
	432	10"	Clay }	
elmont ave. to Dick-				
st. ....	500	12"	Clay }	\$904.55
	474	10"	Clay }	
son st., southerly...	774	12"	Clay }	698.29
				1,602.84
st., Springfield st.,				
ly. ....	367	20"	Clay }	1,067.20
	235	10"	Clay }	
st. Water street to				
st. ....	569	15"	Cem.	762.57
st. I. O., Chestnut				
sterly. ....	285	12"	Cem.	187.28
	174	12"	Clay	299.12
., easterly. ....	150	10"	Clay	165.26
				651.66
re st. I. O., Oak st.,				
ly. ....	300	12"	Clay }	633.59
	398	10"	Clay }	
easterly. ....	250	12"	Cem.	206.20
st., westerly. ....	300	10"	Clay	295.05
				1,134.84
street, Mill river to				
st. ....	920	12"	Clay	866.30
to Walnut st. ....	218	18"	Cem. }	1,759.06
	1,343	15"	Cem. }	
to Alden st. ....	122	12"	Cem.	88.00
to Alden st. ....	827	2'-0" x 3'-0"	Brick	5,009.61
(through Lebanon)				
incy st. ....	1,852	3'-6" x 5'-3"	Brick }	21,668.02
to State st. ....	913	3'-4" x 5'-0"	Brick }	
				29,390.99
st. York st. to Gard-				
st. ....	830	2'-2" x 3'-3"	Brick	2,650.26
t. North Main st. to				
st. ....	250	15"	Clay }	377.17
	207	12"	Clay }	
., easterly. ....	330	10"	Clay	172.92
ave., Main st. to				550.09
ut st. ....	600	15"	Cem.	874.11
	250	8"	Clay	203.61
				1,077.72

e drainage only.

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Harvard st. Yale to St. James ave .....	816 800 291	18" 18" 12"	Clay } Clay } Cem.	\$398.99 266.84 25.68
St. James ave. to Cornell st., Hawley st., Wilbraham road to Monroe st. ....	786 181 380	12" 12" 10"	Cem. Clay	40.40 240.17
Hawthorn st. Hancock street, westerly .....	441	12"	Cem	280.57 445.87
Hayden st. State st., northerly	835 299 222	12" 10" 8"	Clay } Clay } Clay }	24.11
Hebron st. North to Chestnut st. ....	668	12"	Clay	492.56
Hickory st., Mill river inter- cepting sewer to Alden st.	754 228 184 788	20" 18" 15" 12"	Clay } Clay } Clay } Clay }	2,446.84
High street, Maple street to Ingraham ave. ....	523 567 550	18" 15" 12"	Clay } Clay } Clay }	1,938.92
Ingraham ave., easterly....	846	12"	Clay	945.32
Hillman st., Main to Dwight st. ....	350 380	15" 12"	Clay } Clay }	1,436.90
Hillside place, Richelieu court, easterly. ....	106	8"	Clay	....
Holly st. I. O., Worcester to Hampden st. ....	377	15"	Clay	419.11
Hampden st., southerly....	175	12"	Clay	117.69
Hollywood st., Common- wealth ave., easterly....	211 241	12" 10"	Clay } Clay }	536.80 445.87
Holyoke st., Main st., west- erly .....	734	12"	Cem.	928.06
Homer st., State st. southerly	31 370	12" 10"	Clay } Clay }	87.00
Horace st., Dickinson st., northerly .....	363 411	12" 10"	Clay } Clay }	783.12
Howard st. Main st., westerly	344 321	15" 12"	Clay } Clay }	799.34
Water st., easterly .....	312	12"	Cem.	289.14
Water st., westerly .....	350	12"	Cem.	364.47
Hubbard ave., Main street easterly .....	257 321	15" 12"	Clay } Clay }	1,452.96 630.47

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Hunt terrace, Allen street, northerly .....	304	10"	Clay	....
Hunter place, State street, northerly .....	350	12"	Clay	\$602.72
	313	10"	Clay	
Huntington st., Birnie ave., easterly ..	300	12"	Clay	416.95
	300	10"	Clay	
Ingersoll grove, Worthington st., northerly.....	782	12"	Cem.	\$1,038.85
	218	8"	Clay	
Howdoin st., easterly. . .	132	10"	Clay	106.53
Irvington ave., Sumner ave.. southerly .....	300	12"	Clay	1,145.38
	100	10"	Clay	
Jackson street, Sumner ave., southerly.....	460	10"	Clay	56.78
	140	8"	Clay	
Pineywoods ave., northerly.	281	10"	Clay	....
				56.78
James st., Cedar st. northerly	289	15"	Cem.	924.38
	534	12"	Cem.	
Jefferson ave. North Main st. to Chestnut st.....	299	20"	Clay	1,663.86
	299	18"	Clay	
See private ways also.	276	15"	Clay	
	60	12"	Clay	
	414	12"	Cem.	492.50
	78	6"	Clay	37.89
				2,194.25
John st. Fulton to Plainfield st.	652	12"	Cem.	420.18
Johnson st., Dickinson st. to Pasadena ave.....	1,964	18"	Clay	3,756.87
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay	1,106.40
	551	10"	Clay	
†Dickinson st., southerly..	350	15"	Clay	823.06
	301	12"	Clay	
	186	10"	Clay	
Kensington ave. Oakland st. to Earl st.....	451	18"	Clay	1,929.46
	402	15"	Clay	1,179.27
Kenwood Park, Belmont ave. northerly.....	130	12"	Clay	139.96
	1,127	10"	Clay	
Kenwood terrace, Belmont ave. to Sumner ave....	218	12"	Clay	305.66
	197	10"	Clay	
Kibbe ave., Sumner st. to Worthington st.....	260	18"	Clay	552.92
†Kibbe Hollow, northerly of Worthington st.....	447	24"	Clay	....

†Surface drainage only.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
King st., Walnut to Hancock st. ....	504	15"	Cem. }	\$921.37
	441	12"	Cem. }	
Hancock to Eastern avenue	710	18"	Cem. }	1,808.75
	686	15"	Cem. }	
Eastern ave. to Logan st....	405	12"	Cem. }	96.24
	72	10"	Clay }	
* Westford ave. to Wilbra- ham ave.....	427	10"	Clay	321.81
				\$3,148.17
Knox st., Mill river to Wind- sor st. ....	849	15"	Cem.	116.18
	437	24"	Clay	1,144.10
				1,260.28
Ladd st., Eastern ave. to Lo- gan st. ....	243	15"	Clay }	424.92
	304	12"	Clay }	
Lafayette st., St. James ave. to Amherst st. ....	582	12"	Clay }	514.86
	21	10"	Clay }	
Laurel ave., Conn. river to Plainfield st. ....	888	18"	Cem.	2,088.10
	60	18"	Clay	282.48
				2,370.58
Laverne ave. Bellevue to Ma- rengo ave. ....	211	10"	Clay	....
Lebanon st. (see Hancock)	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly.....	158	2'-0" x 3'-0"	Brick	1,495.77
Hancock to Eastern ave ...	606	18"	Cem. }	1,701.28
	816	15"	Cem. }	
Lenox st., Sumner avenue, southerly. ....	465	10"	Clay	3,197.05
				32.91
Lexington ave. Chestnut st. to Massasoit st. ....	668	12"	Clay	516.31
Leyfred terrace, Belmont ave., northerly.....	300	18"	Clay }	957.30
	317	15"	Clay }	
Liberty st., Garden brook to Main st. ....	118	12"	Clay	179.19
	70	1'-6" x 1'-7"	Brick }	1,036.34
	172	12"	Cem. }	
Garden brook to Chestnut st.	967	15"	Cem.	
	171	8"	Cem.	
Chestnut to Webster st. ....	784	2'-4" x 3'-6"	Brick }	9,123.49
	659	1'-10" x 2'-9"	Brick }	
	684	2'-2" x 3'-3"	Brick }	5,383.15
Webster to Armory st. ....	366	3'-0" x 4'-6"	Brick }	
	1,282	2'-2" x 3'-3"	Brick }	2,539.81
	317	1'-10" x 2'-9"	Brick }	
	449	2'-2" x 3'-3"	Brick }	5,227.99
Armory to Wentworth ave..	1,194	24"	Clay }	
	1,103	18"	Clay }	23,489.97
	714	15"	Clay }	

\*Sanitary sewer.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
st. Oak st., easterly...	297	12"	Clay	\$232.47
st. Magazine street to				
ral st.....	823	12"	Clay	676.54
st. Chestnut to Cass st	470	18"	Cem. }	1,254.55
	862	15"	Cem. }	
ld st. Belmont ave. to				
field st.....	159	15"	Clay	\$335.11
d st., northerly.....	69	6"	Clay	7.10
				342.21
st., York to Mill st..	84	3'-0" x 4'-6"	Brick	6,804.18
	364	2'-9" x 4'-1 1/2"	Brick	
	686	2'-6" x 3'-9"	Brick	
t., Ladd st., northerly	88	10"	Clay	67.64
lle st., northerly.....	200	10"	Clay	147.48
s st., southerly.....	97	10"	Clay	109.36
d st., Water st., east-				324.48
.....	500	12"	Cem.	344.69
low terrace, White				
westerly.....	246	12"	Clay }	290.03
	200	10"	Clay }	
l st., submerged outlet	26	18"	Clay	5,387.70
	290	18"	Wood	
	28	18"	C. I. }	
river to Washington				
ue.....	1,310	24"	Clay	2,086.09
Vashington avenue.)	346	2'-4" x 3'-6"	Brick	1,936.97
ngton ave., northerly..	399	15"	Clay }	1,027.66
	512	12"	Clay }	
	160	10"	Clay }	
r ave., southerly.....	356	8"	Clay	386.61
r pl. to Sumner ave..	423	10"	Clay	379.51
t. to Warner place...	136	24"	Clay	2,608.25
	265	18"	Clay	
	350	15"	Clay	
	400	12"	Clay	
	240	10"	Clay	
	90	2'-0" x 3'-0"	Concr	447.63
				14,260.42
st. Water st., easterly	650	12"	Cem.	750.93
street, Conn. river to				
field st.....	305	18"	Clay }	986.21
	396	15"	Clay }	
	396	12"	Clay }	
	283	10"	Clay }	
st., Main to Chestnut				
.....	1,335	2'-0" x 3'-0"	Brick	6,113.12
ut to Spring st.....	720	15"	Cem.	1,655.26
				7,768.38

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Lyndale st., Belmont ave., northerly.....	350 300 324	15" 12" 10"	Clay Clay Clay	
Lyons st., I.O., Main street, northerly.....	261	18"	Clay	
Madison ave. Central street, northerly.....	250 287	12" 10"	Clay Clay	
Magazine st., Worthington to Lincoln st.....	682 249	18" 15"	Cem. Cem.	
Magnolia ter. east side, Sum- ner ave. to Spruceland ave. west side, Sumner ave. to Spruceland ave.....	620 621	10" 10"	Clay Clay	\$1,233.46
overflow connection between east and west side.....	62	8"	Clay	26.00
Washington ave. to Spruce- land ave.....	362 602	24" 12"	Clay Clay	21.08
Main st., Peconsic avenue to Longhill st.....	191	2'-4"x3'-6"	Concrt	1,077.51
Mill river to Mill st.....	258	10"	Clay	342.25
Locust st., southerly.....	800	15"	Cem.	1,430.27
York to B. & A. R.R.....	56 1,772 906 990 1,624 864 263	7'-0" cir. 6'-6" cir. 5'-6" cir. 5'-0" cir. 3'-4"x5'-0" 2'-4"x3'-6" 12"	Brick Brick Brick Brick Brick Brick Clay	20,812.99
Cypress to Emery st.....	298 270	15" 12"	Clay Clay	164.82
Emery st., southerly.....	278	12"	Clay	1,210.56
Emery st. to Sargeant.....	341 442 480 186	24" 20" 18" 15"	Cem. Clay Clay Clay	389.20
Main st. I. O., Chicopee river to Pine st.....	2,321	2'-4"x3'-6"	Brick	2,539.81
Pine to Cedar st.....	500 185 103	18" 15" 12"	Cem. Cem. Clay	7,636.81
Cedar to Lyons st.....	1,110	2'-0"x3'-0"	Brick	870.78
Chicopee river through pri- vate land and Main st. to Beaudry st.....	285 929	18" 15"	Clay Clay	128.49
				5,024.19
				1,055.55

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Parker street, westerly.....	260	12"	Clay	\$254.89
Lyons st., easterly.....	205	24"	Clay	1,334.58
	245	18"	Clay	
	129	12"	Clay	
Malden st. Allen st., southerly	542	15"	Clay	
	291	12"	Clay	25.75
	494	10"	Clay	
Manhattan st. Eastern ave. to Walnut st. ....	290	15"	Clay	862.70
	645	12"	Clay	
	205	10"	Clay	
Maple st., State to Temple st.	815	18"	Clay	
	.....	.....	.....	675.51
Park to High st. ....	225	18"	Clay	51.55
Union st., southerly.....	515	18"	Cem.	505.21
	135	12"	Cem.	959.18
Central st., southerly.....	33	18"	Cem.	
	388	12"	Cem.	160.95
	784	12"	Clay	
Pine st., northerly.....	195	15"	Cem.	1,289.58
	522	12"	Cem.	
Mapledell street State street northerly .....	337	15"	Clay	4,735.37
	300	12"	Clay	
	346	10"	Clay	
Maplewood ter. Fort Pleasant ave., easterly .....	682	15"	Clay	22.21
	329	12"	Clay	
	178	10"	Clay	
Marble st., Main st., easterly	222	18"	Cem.	
	586	15"	Cem.	1,178.97
	242	12"	Cem.	
Marengo Park Belmont ave. easterly .....	443	15"	Clay	95.25
	612	12"	Clay	
	778	10"	Clay	
Margaret st., Water st., west- erly .....	520	12"	Cem.	
Water st., easterly .....	858	12"	Cem.	507.30
				889.53
Marion st., Bay st., southerly	838	12"	Clay	1,396.83
Chapin st., easterly.....	94	10"	Clay	
	319	8"	Clay	25.89
				888.62
Market st. State st. northerly	119	10"	Clay	412.04
Sanford st., southerly.....	200	12"	Clay	
Sanford st. to Harrison ave	301	15"	Clay	1,197.72
	350	12"	Clay	
Harrison ave., southerly...	154	12"	Cem.	.....
				1,609.76



## SEWER CONSTRUCTION.—CONTINUUM.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Marshall place (see Melrose street) .....				
Marvin st., Pratt st., southerly	149	10"	Clay	\$218.09
Mason place, Dickinson st., southerly.....	900	12"	Clay	433.02
	276	10"	Clay	
Mason st., State to Pease st.	349	15"	Clay	
	359	12"	Clay	746.99
Massachusetts ave., Wilbraham road, southerly.....	800	15"	Clay	953.66
	800	12"	Clay	
	227	10"	Clay	
Massasoit place Massasoit st. easterly .....	381	12"	Clay	....
Massasoit st., Carew street, northerly.....	709	12"	Cem.	\$579.69
Lexington ave., southerly...	300	12"	Clay	258.56
	250	10"	Clay	
Montmorenci st., southerly..	233	10"	Clay	
Montmorenci st., northerly.	152	10"	Clay	168.93
Mattoon street, Chestnut to Salem st. ....	356	1' 4" x 2' 0"	Brick	92.94
	87	15"	Cem.	1,100.12
Maynard st., State st. to Shattuck ave. ....	431	15"	Clay	607.82
	400	12"	Clay	
McKnight st., Catharine to Sherman st. ....	255	15"	Cem.	
	30	15"	Clay	421.42
Catharine to Bowles st. ....	141	10"	Cem.	56.78
	26	10"	Clay	67.27
Bowles street to Girard ave.	119	12"	Cem.	75.32
	263	10"	Cem.	81.85
Mechanic st., Water street, westerly.....	302	12"	Clay	233.51
	20	8"	Cem.	336.15
Medford st., Birnie avenue, easterly.....	390	12"	Clay	205.25
	183	10"	Clay	40.30
Melrose st., sewer between Hickory st. and Melrose. Eastern ave. to Walnut st..	429	18"	Clay	245.53
	263	15"	Clay	
	558	10"	Clay	
Marshall place, Eastern ave. to Walnut .....	415	10"	Clay	1,577.06
	169	8"	Clay	
Cottage avenue, Melrose to Marshall place .....	74	12"	Clay	
Merrick avenue, King street, southerly .....	301	12"	Cem.	48.50

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Merwin st., North Main to Chestnut st.....	774	15"	Clay	....
Middlesex st., Wilbraham road, southerly.....	296 304	15" 12"	Clay Clay }	\$580.26
Mill river, intercepting sewer, Mill river to Locust st....	370 691	5'-3" cir. 4'-0" cir.	Brick Brick }	\$6,066.64
Locust st. to Hickory st....	587 131 1,743 779 1,611	4'-0" cir. 3'-6" x 5'-3" 5'-9" cir. 4'-3" cir. 3'-3" cir.	Brick Brick Brick Brick Brick }	42,706.00
*in Mill and Hickory sts....	833	2'-2" x 3'-3"	Brick	9,355.23
*Hickory st. to Gunn square brook by northerly shore of Watershops pond.....	4,495	2'-2" x 3'-3"	Brick	45,545.71
Mill st., Main st., easterly....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-6" x 3'-9"	Brick	4,764.79
				4,840.24
Monmouth st. Dorchester st., northerly and easterly....	199 171	12" 10"	Clay Clay	218.15 121.75
Yale st., westerly.....	64 278	12" 10"	Clay Clay	45.95 281.47
Berkeley st., northwesterly..	350	12"	Clay	235.62
				902.94
Monroe st., Hancock to East- ern ave .....	611 789	18" 15"	Cem. Cem. }	1,983.29
Eastern ave. to Colton st..	316	12"	Cem.	
Monson ave. Greene street, northerly .....	200	8"	Clay	....
Montmorenci st. Chestnut to Massasoit st.....	676	12"	Clay	790.32
Montrose st., State to Burr st.	338 217 329	15" 12" 10"	Clay Clay Clay }	75.74
Mooreland ave., Carew street, northerly to Van Horn ave	601 301 299 212	18" 15" 12" 10"	Clay Clay Clay Clay }	1,467.66
Morgan st., Garden brook to Main st .....	252	12"	Cem.	199.08
Garden brook to North st..	25 634	18" 18"	Cem. Clay	48.07 1,460.31
				1,707.46

\*Elliptical.

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Morris st., Main st., easterly.	915	2'-0" x 3'-0"	Brick	\$3,942.83
	496	12"	Cem.	359.07
Mountainview st., Forest Park ave., easterly... ..	297	12"	Clay	\$3,301.90 28.19
	297	10"	Clay	
Mulberry st., Maple st., east- erly and northerly.....	687	15"	Cem.	1,246.18
	629	12"	Cem.	
	246	10"	Clay	
west from Ridgewood ter- race.....	144	15"	Clay	....
Murray Hill ave., Liberty st. northerly.....	....	....	Clay	1,479.77 96.24
Myrtle st. Card Factory Pond brook, northerly.....	107	10"	Clay	69.76
	237	8"	Clay	
Myrtle st., I. O., Main to Wor- cester.....	377	24"	Clay	1,003.44
Worcester st., southerly....	378	10"	Clay	355.34
Berkshire st., southerly.....	180	10"	Clay	189.63
Hampshire st., southerly....	126	10"	Clay	100.99
Nelson ave., Greene street, northerly.....	90	12"	Cem.	27.96
Lebanon st. to King.....	188	10"	Cem.	126.54
	67	10"	Clay	93.63
Nelson street Nursery street, easterly .. .. .	308	24"	Clay	248.13 ....
New st., E. Court st., north- erly .. .. .	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Dwight st., westerly.....	164	10"	Clay	203.79
Newman st., Knox st., west- erly .. .. .	175	12"	Cem.	430.99 11.49
Norfolk st., Wilbraham road, southerly .. .. .	300	15"	Clay	566.08
	300	12"	Clay	
	229	10"	Clay	
North st. Carew st., northerly	190	8"	Cem.	84.88
Church to Grosvenor st....	68	18"	Cem.	157.13
Morgan to Ringgold st.....	198	18"	Cem.	356.84
Osgood to Hebron st.....	130	18"	Clay	426.85
	165	10"	Clay	
Bancroft st. to Brookline ave	302	18"	Clay	411.55
Bancroft st., northerly.....	153	12"	Cem.	114.54
Jefferson ave., northerly....	233	8"	Clay	177.12
Calhoun st., northerly. ....	256	8"	Clay	48.13
Waverly to Grove st.....	362	12"	Clay	302.86
Harriet st., southerly.....	86	8"	Clay	..
				2,079.90

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Northampton ave., Wilbraham road, southerly.....	1,101	12"	Clay	\$830.79
North Church ave., Cook's ave., easterly .....	209	10"	Cem. }	....
Cook's avenue, westerly (for cost see Cook's ave.)...	133	10"	Cem. }	....
No Main st. Morgan st. southerly	232	8"	Clay	\$171.18
Morgan st., northerly .....	173	8"	Clay	90.69
Arch to Osgood st. ....	730	15"	Cem.	713.66
*Arch st. to Jefferson ave....	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st....	359	24"	Clay	2,568.01
	420	30"	Clay	
	285	15"	Clay	
	170	12"	Clay	
Grove st., northerly.....	170	12"	Clay	226.45
Douglas to Harriet st. ....	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st. ....	250	24"	Clay	470.75
Douglas to Eagle st. ....	326	2'-4"x3'-6"	Brick	1,840.24
	272	1'-10"x2'-9"	Brick	
Eagle st., northerly .....	142	24"	Clay	449.66
Wason ave., southerly ...	215	2'-0"x3'-0"	Brick	860.00
Wason ave., northerly.....	348	12"	Clay	281.41
Norwood st. Main to Hanover st.....	1,051	12"	Cem.	10,520.67
Nursery st. Liberty to Franklin st.....	694	2'-8" cir.	Brick	1,069.55
Franklin st., northerly.....	587	2'-8" cir.	Brick	2,284.52
			....	2,284.52
Oak st., Union to State.....	741	2'-0"x3'-0"	Concrt	8,092.11
Union to Tyler st. ....	220	18"	Clay	752.00
	268	15"	Clay	
Walnut st. to Tyler st. ....	158	18"	Cem.	280.65
				4,124.76
Oak st. I. O., north from Main	179	15"	Cem. }	637.00
	171	12"	Cem. }	
Main st., southerly .....	590	2'-2"x3'-3"	Brick	2,345.84
brick sewer to Hampshire st..	797	24"	Clay	1,652.79
Hampshire st., southerly...	285	18"	Clay	1,562.43
	300	15"	Clay	
	400	12"	Clay	
Oak Grove ave., State st. northerly.....	349	18"	Clay	6,198.06
	327	15"	Clay	....
	158	12"	Clay	
	256	12"	Clay	....
Oakland st., Dickinson st. to Belmont ave. ....	895	24"	Clay	2,218.71
Dickinson to Orange street.	254	24"	Clay	1,619.20
	350	18"	Clay	
	170	12"	Clay	
	218	8"	Clay	110.79

\*Elliptical.

## SEWER CONSTRUCTION.—Continued.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Allen to Orange street.....	635	18"	Clay	\$1,428.06
	304	15"	Clay	
	193	12"	Clay	
	404	10"	Clay	
Sumner ave. to Garfield st.	280	12"	Clay	468.60
	221	10"	Clay	
Olive st. Eastern ave. to Logan st.....	540	10"	Clay	\$5,945.36
Orange st. Oakland st., east- erly .....	583	8"	Clay	961.35
White st., westerly.....	381	12"	Clay	
	649	10"	Clay	
White st., easterly.....	699	10"	Clay	
Orchard st., Plainfield street, westerly.....	325	20"	Clay	1,015.57
	301	15"	Clay	
	297	12"	Clay	
	140	10"	Clay	
Orleans court, Orleans street, westerly. ....	205	8"	Clay	....
Orleans st., Union st., north- erly .....	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	Clay	
Tyler st., northerly .....	188	10"	Cem.	187.74
Pendleton ave., northerly..	231	12"	Cem.	327.73
Ormond st. Belmont to Sum- ner ave .....	275	10"	Clay	1,007.59
Osgood st. Garden brook to Main st.....	257	12"	Cem.	320.94
Garden brook to North st. ...	588	18"	Cem.	1,233.63
	92	18"	Clay	174.87
Oxford st., Riverview terrace, northerly .....	63	12"	Clay	1,719.44
Ozark street, Grand avenue, southerly.....	456	10"	Clay	23.58
Palmer avenue Locust street, easterly .....	351	18"	Clay	1,190.78
	337	15"	Clay	
	14	12"	Cem.	
Park st., Main to Willow st..	395	24"	Clay	1,609.31
Willow to Maple st.....	200	24"	Clay	1,431.06
	557	18"	Clay	
Parker st., I. O., Chicopee river to Main st.....	32	24"	Clay	3,040.36
	221	12"	Clay	261.81
Main st., southerly .....	1,098	24"	Clay	2,488.05
*Loon pond to B. & A. R. R.	1,227	12"	Clay	1,265.36
				4,014.23

\*Surface drainage only.

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Parkwood st., Sumner ave., southerly.....	215	12"	Clay	\$70.08
	204	10"	Clay	
Pasadena ave., White street, southerly.....	156	12"	Clay	258.61
	291	10"	Clay	
Pasco st., I. O., Essex street, southerly .....	724	10"	Clay	607.80
Patton st., Garden brook to Main st.....	214	10"	Clay	\$173.73
, Garden brook, easterly.....	352	18"	Clay	1,572.67
	349	15"	Clay	
	537	12"	Clay	
Peabody lane, Willow street, westerly .....	216	10"	Clay	1,746.40
Pearl st., Chestnut to Spring st. ....	514	24"	Clay	1,792.62
	447	20"	Clay	
Spring st., easterly.....	190	1'-6" cir.	Brick	96.16
				1,888.78
Pesse st Catharine to Bowles	250	12"	Clay	15.05
Pecousic ave., Mill river to Main st.....	352	2'-8"x4'-0"	Concrt	2,155.17
Pendleton ave. Walnut st. to Hancock st.....	287	18"	Cem. }	1,663.94
	524	15"	Cem. }	
	429	12"	Cem. }	
Hancock st. to Eastern ave.	600	18"	Cem. }	1,395.98
	793	15"	Cem. }	
Phoenix st., Liberty street, easterly.....	236	18"	Clay	3,059.92
	250	15"	Clay	840.32
	89	10"	Clay	
Pine street, Mill to Cedar st.	740	2'-6"x3'-9"	Brick	13,659.54
	1,529	3'-6"x5'-3"	Brick	
	500	3'-10"x5'-9"	Brick	
Cedar to Walnut st.....	62	18"	Cem. }	1,665.54
	884	15"	Cem. }	
	631	12"	Cem. }	
Pine st., I. O., Main st., east- erly .....	1,896	24"	Clay	4,170.03
Pine st. court, Pine st., east- erly .....	348	10"	Cem.	266.39
Pineywoods ave., Washing- ton ave., northeasterly...	334	15"	Clay	....
	263	12"	Clay	
Magnolia terrace, westerly.	350	10"	Clay	....
Magnolia terrace to Jackson st	343	20"	Clay	....
	404	12"	Clay	

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Jackson st. to Forest Park ave.....	341	12"	Clay	....
Plainfield st., Sargeant st. to Fulton st.....	414 537 456 244	18" 15" 12" 10"	Clay Clay Clay Clay	..... \$2,525.13
Washburn st., southerly....	122	12"	Clay	129.78
Washburn to Roseland st...	331	2'.8"x4'.0"	Brick	1,555.00
	303	2'.6"x3'.9"	Brick	2,367.93
	287	2'.4"x3'.6"	Brick	4,518.58
	294	2'.2"x3'.3"	Brick	
Rowland st., southerly....	648	2'.2"x3'.3"	Concr.	3,402.82
Rowland st. to Talcott st...	288	24"	Clay	
	299	20"	Clay	1,208.95
Talcott ave., northerly.....	216	10"	Clay	158.46
Wason ave. to Demond ave.	304	24"	Clay	
	249	20"	Clay	1,253.59
	53	18"	Clay	
Pleasant st., Bay st. southerly	296	12"	Cem.	\$17,120.24
Plymouth st., Fulton st., east- erly .....	375	10"	Clay	249.74 196.59
Pomona st., Sumner avenue, northerly .....	580 297	12" 10"	Clay Clay	459.94 204.92
Portland st., Birnie ave., east- erly .....	251 224	12" 10"	Clay Clay	664.86 351.33
Portsmouth street.....	212	12"	Clay	253.65
Pratt street, Chestnut to Marvin street.....	350 299	15" 12"	Clay Clay	869.53
Prince st., King to Lebanon st. ....	329	12"	Cem.	333.15
Princeton st., Bay to Amherst street .....	103 689 151	18" 18" 15"	Cem. Clay Clay	289.08 724.15 177.72
Yale to Vassar st.....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	Cem.	195.52
Private ways and private lands:				1,386.47
Armory Hill sewer from Ar- mory st., through private grounds east of Armory st to Worthington st.....	150 900 249	2'.5"x3'-7½" 2'.8"x4'.0" 2'.1"x3'-1½"	Brick Brick Brick	5,318.04

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts in front and around High school.....	751	12"	Cem.	\$408.75
High school to State st....	492	24"	Clay	848.26
Cemetery brook, Morris st., easterly, north of Central street.....	88	24"	Clay	192.35
				<u>\$1,449.36</u>
Chester to Hancock street.	174	24"	Clay	569.59
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st.....	218	8"	Clay	....
	2,936	5'-6" cir.	Brick	47,577.34
	766	5'-0" cir.	Brick	
	1,303	4'-6" cir.	Brick	
	236	3'-0" x 4'-6"	Brick	
Worthington st., northeast- erly to Lyman st., thence via Railroad land to Ar- mory st.....	3,274	4'-7½" cir.	Brick	29,761.32
	952	4'-1" cir.	Brick	
				<u>77,388.66</u>
Hickory to Melrose street (see Melrose street)....		18"	Clay	....
Jefferson ave., passage way in rear of lots on south side.	135	2'-0" x 3'-0"	Brick	....
	518	12"	Cem.	364.84
				<u>364.84</u>
Main to Dale st., between Hubbard ave. and Wil- liam street .....	655	12"	Cem.	441.92
Passage way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	402.70
Potter place, State st., north- erly .....	396	15"	Clay	....
	301	12"	Clay	
	274	10"	Clay	
Sewer in ave. Hampden st., southerly, near Water st.	111	12"	Clay	147.14
Springfield st. and Glen- wood, via Atwater Glen.	677	3'-6" cir.	Brick	14,614.89
	598	3'-8" cir.	Brick	
	389	4'-3" cir.	Brick	
	1,292	3'-0" cir.	Brick	
	40	2'-0" cir.	Brick	
	16	2'-10" x 4'-3"	Brick	3,889.98
	1,294	24"	Clay	
				<u>18,504.87</u>



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in feet.	Size.	Material.	Cost.
Prospect st. Chestnut street, easterly.....	218	18"	Clay	\$623.53
	199	15"	Clay	
	196	12"	Clay	
Pyncheon st.....	950	2'-0" x 3'-0"	Brick	3,106.08
Quebec st., I. O., Lyons st., easterly.....	209	15"	Clay	409.32
Queen st., Walnut to Han- cock st.....	634	12"	Cem.	634.22
Quincy st., Oak to Stebbins st.	860	12"	Cem.	\$619.96
Hancock to Stebbins st.....	522	12"	Cem.	549.56
Hancock to Eastern ave.....	637	18"	Cem. }	1,703.99
	765	15"	Cem. }	
Colton to Eastern ave.....	208	10"	Clay	156.87
				<hr/> 3,090.40
Railroad st. Water st. easterly	351	12"	Clay	490.75
Randolph street, Maplewood terrace, easterly.....	250	12"	Clay	....
	251	10"	Clay	
Ranney street, Wilmont st., northerly.....	200	10"	Clay	151.76
Raymond ave., Carew street, northerly.....	277	10"	Clay	217.32
Reed st., State st., southerly	219	12"	Clay	134.79
	309	10"	Clay	
	750	20"	Clay	
Revere st., White st. southerly	250	10"	Clay	23.32
	209	8"	Clay	
Richelieu court, Adams st., southerly.....	160	12"	Clay	474.21
	260	10"	Clay	
Richelieu place, Richelieu court, easterly.....	100	8"	Clay	....
Ridgewood place, Mulberry st., northerly.....	400	12"	Clay	29.46
Ridgewood ter., Mulberry st. westerly.....	226	10"	Clay	....
Rimmon ave. Green lane to Weaver Ramble.....	859	18"	Clay	....
Ringgold st., North to Chest- nut st.....	117	8"	Cem. }	709.23
	632	2"	Cem. }	
Ripley place, St. James ave., southerly.....	230	10"	Cem.	163.48
Riverview st., Riverview ter- race to Chase ave.....	63	10"	Clay	.....
	310	10"	Clay	354.50
Forest Park ave., southerly.	299	10"	Clay	217.39
				<hr/> 571.89

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Riverview ter., Fort Pleasant ave., easterly .....	298	15"	Clay	.....
	322	12"	Clay	
	105	10"	Clay	
Rogers ave., I. O., Main st., southerly .....	97	15"	Clay	\$312.13
	152	12"	Clay	
Roseland st. Plainfield street, westerly .....	350	18"	Clay	1,352.31
	350	15"	Clay	
	173	12"	Clay	
Rowland st., Conn. river to North Main st., including 630' in Douglas st. ....	579	5'-3" cir.	Brick	32,489.36
	51	1'-8" x 2'-6"	Brick	
	1,247	6'-6" cir.	Brick	
	1,330	6'-0" cir.	Brick	
Rutland ave. Wilbraham road to State st. ....	199	8"	Clay	147.15
Rutledge ave., Main street, easterly .....	574	24"	Clay	49.43
Sachem st., Dickinson st., northerly .....	330	10"	Clay	345.31
Salem st. Pearl st., south and east .....	283	18"	Cem.	804.72
	99	15"	Cem.	
	290	12"	Cem.	
*Sanford st .....	536	3'-2" x 4'-9"	Brick	4,014.47
*Sargeant st. Fulton to Main (cost shown under Clinton street) .....	920	4'-6" x 6'-9"	Brick	....
School st. Union to Mulberry street .....	549	15"	Clay	\$620.95
Union st., northerly .....	262	10"	Clay	204.00
Scott st., White st. to Pomona st. ....	300	12"	Clay	824.95
	347	10"	Clay	
Searle place, Walnut street, easterly .....	178	10"	Clay	231.61
Seventh st., Fulton to Main st. Sewer in avenue (see private ways).	830	12"	Cem.	700.00
Sewer (see private ways).				
Sharon st., Garden brook to Main st. ....	360	15"	Cem.	762.77
Garden brook, easterly ....	601	18"	Cem.	1,211.18
	463	12"	Cem.	
Shattuck ave., Maynard ave. to Willard ave. ....	200	10"	Clay	1,973.95
	143	8"	Clay	
Willard ave., easterly ....	50	8"	Clay	....
Shefford st., Springfield st., westerly .....	293	12"	Clay	601.41
	350	10"	Clay	

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Co
Sheldon st., Birnie ave. to N.	590	15"	Cem.	.....
Main st. ....	42	10"	Clay	\$43.87
Sherman st. Bay to Clarendon				
st. ....	175	12"	Cem.	571.12
Bay to McKnight st. ....	443	12"	Cem.	
State to McKnight st. ....	301	18"	Clay	
	301	15"	Clay	
	544	12"	Clay	1,314.14
Silver st. Armory st., easterly	302	15"	Clay	27.26
	297	12"	Clay	
Smith st. Knox to Dorne st.	166	10"	Clay	48.55
	34	12"	Clay	
Sorrento ave., Sumner ave., northerly .....	325	12"	Clay	271.15
Grenada terrace, northerly.	367	10"	Clay	209.65
Spring st south from Lyman st	281	15"	Cem.	2,479.25
	130	12"	Cem.	
Worthington to State st. ....	470	18"	Cem.	
	640	15"	Cem.	
	644	12"	Cem.	87.28
Worthington st., northerly..	132	12"	Clay	
Worthington to Summer st.	183	5' 0" cir.	Brick	
† .....	49	4'-3"x6' 0"	Brick	
Springfield st., Atwater ter- race, northerly .....	892	20"	Clay	1,498.24
	360	18"	Clay	
	413	15"	Clay	
	286	12"	Clay	
	437	10"	Clay	
Springfield st. and Glenwood (see private ways).				
Spruce street, Central street, northerly .....	600	12"	Cem.	
Spruceland ave., Magnolia terrace, westerly .....	67	8"	Clay	....
Beechwood ave., easterly...	242	8"	Clay	136.48
Beechwood ave., westerly...	299	8"	Clay	94.83
Longhill street, easterly...	450	10"	Clay	410.40
Stafford st., Armory street, westerly .....	402	10"	Clay	
State st., Water st., westerly	70	12"	Cem.	45.27
	91	12"	Cem.	71.19
	82	12"	Clay	83.01
Water st. to Main st. ....	907	18"	Clay	1,167.64
Main to Dwight st. ....	636	18"	Clay	1,433.50
*Dwight st. to High school..	29	2'-8"x4' 0"	Brick	4,897.66
	265	2'-2"x3'-3"	Brick	
	417	2'-0"x3'-0"	Brick	

†Segmental.

\*Elliptical

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
At High school, connecting old with new.....	54	24"	Clay	\$161.88
High school to Elliott street	305	2'-0" cir.	Brick	469.65
High school to Walnut st.	726	2'-0" x 8' 0"	Con.	6,437.39
	306	2'-2" cir.	Con.	
	1,440	2'-0" cir.	Con.	
connecting new with old...	54	18"	Clay	
Federal street, easterly....	695	2'-0" cir.	Brick	1,062.40
	130	12"	Clay	212.78
Oak to Buckingham st....	2,110	18"	Cem.	2,590.03
Hancock to Sherman st....	1,147	3'-4" x 5'-0"	Brick	13,555.85
Sherman to Chapin st....	492	3'-0" x 4'-6"	Brick	
Chapin st. to Andrew st....	726	3'-0" x 4'-6"	Brick	
Andrew st. to Oak Grove ave.....	937	2'-10" x 4'-3"	Brick	
east from Oak Grove ave. to Courtland st.....	548	2'-4" x 3'-6"	Brick	5,042.79
	283	2'-2" x 3'-3"	Brick	
	352	2'-0" x 3'-0"	Brick	
Cortland st., easterly.....	355	24"	Clay	4,179.24
	112	18"	Clay	
	3,399	12"	Clay	
Stearns sq. (west roadway), Bridge street, northerly...	172	12"	Clay	\$52,204.24
Stearns sq. (east roadway), Bridge street, northerly...	167	8"	Clay	205.83
Worthington st., southerly...	148	12"	Clay	67.00
Stebbins street, Union street to State st.....	300	12"	Clay	342.98
	293	10"	Clay	409.98
Sterns ter., Central street, northerly ..	393	12"	Clay	596.89
St. James ave., State street northerly ..	191	18"	Clay	906.01
	467	12"	Clay	
	123	10"	Clay	
Bay st. to Ripley ave.....	91	12"	Cem.	135.23
Florida st. to Ripley ave...	469	12"	Cem.	500.89
Florida st., northerly.....	417	18"	Cem.	1,073.90
	300	12"	Cem.	
Clarendon st. to Westminster street .....	248	15"	Cem.	404.60
Clarendon st., northerly...	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'-0" x 3'-0"	Brick	2,738.53
Harvard to Princeton st....	528	24"	Clay	1,587.44
Princeton st., northerly...	308	18"	Clay	965.55
	249	15"	Clay	
	57	12"	Clay	8,376.97

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Stockbridge st., Main street, easterly .....	777	18"	Cem.	\$1,084.57
Suffolk st., Wilbraham road southerly .....	300	15"	Clay	\$294.06
	300	12"	Clay	565.35
	795	10"	Clay	
Sullivan st., Armory street, easterly .....	395	12"	Clay	859.41
†Summer st., Spring to Ar- mory street .....	44	4'- 3' x 6'-0"	Brick	
	*1,344	4'- 2" x 6'-3"	Brick	
	*1,093	2'-10" x 4'-3"	Brick	24,048.88
	*750	3'- 8" x 5'-6"	Brick	
Sumner ave., Fort Pleasant ave. to Longhill st. ....	448	12"	Clay	
	358	10"	Clay	815.24
Fort Pleasant ave. to Ran- dolph st. ....	673	2'- 0" x 3'-0"	Brick	
Randolph st. to Jackson st. .	360	1'-10" x 2'-9"	Brick	
Jackson st. to Forest Park av.	360	1'- 8" x 2'-6"	Brick	7,968.46
Forest Park ave. to Green- leaf st. ....	367	1'- 6" x 2'-3"	Brick	
Greenleaf st. to Belmont ave	355	20"	Clay	
	851	18"	Clay	
	736	15"	Clay	2,915.88
	272	12"	Clay	
	426	10"	Clay	
Belmont ave., easterly .....	100	8"	Clay	37.49
*Dickinson st. to White st. .	2,219	2'-8" x 4'-0"	Brick	11,531.37
White st., easterly .....	565	2'-2" x 3'-3"	Brick	2,391.46
	207	8"	Clay	60.42
Sumner terrace, Sumner ave- nue, northerly .....	252	12"	Clay	25,720.32
	220	10"	Clay	440.44
Symonds ave Worthington st to Bridge st. (includes cost of Bond place) .....	300	15"	Cem.	696.89
Talcott ave., Fisk ave. to Plainfield st. ....	362	15"	Clay	
	316	12"	Clay	549.57
Taylor st. Main to Chestnut st	650	15"	Cem.	
	341	12"	Cem.	1,347.50
	248	12"	Clay	255.73
Temple st. Maple st., easterly outlet into High school sewer	194	15"	Clay	236.73
	169	15"	Clay	171.71
Tenth street, Garden brook, easterly .....	300	18"	Clay	406.44
	302	15"	Clay	
	421	12"	Clay	1,256.39
	4	8"	Clay	

Segmental.

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Terrence st Union to State st	374	12"	Clay	\$565.26
	313	10"	Clay	
	48	10"	Cem.	
				34.02
				\$599.28
Thomas st Birnie ave., easterly	451	10"	Clay	338.41
Thompson st., Worthington				
st., southerly.....	603	12"	Cem.	638.27
St. James ave. to Bay st....	703	15"	Cem.	749.22
State to Bay st.....	852	12"	Cem.	653.12
Tracy avenue Franklin street				2,040.61
southerly .....	14	10"	Clay	15.48
	262	10"	Clay	.....
				15.48
Tyler st., Oak to Hancock st	717	15"	Cem.	1,165.68
	663	12"	Cem.	
Hancock to Eastern ave...	601	18"	Cem.	778.27
	795	15"	Cem.	644.31
Eastern ave., easterly ....	251	10"	Cem.	139.49
				2,727.75
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Oak st.....	1,610	3'-4" x 5'-0"	Brick	14,719.10
	1,540	2'-0" x 3'-0"	Brick	
	*718	3'-2" x 4'-9"	Con.	
	951	2'-8" cir.	Con.	13,447.59
	1,021	2'-3" cir.	Con.	
Oak to Orleans st.....	404	15"	Cem.	467.96
Hancock to Stebbins st.....	261	2'-0" x 3'-0"	Brick	2,307.33
	335	1'-10" x 2'-9"	Brick	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave...	600	18"	Cem.	1,413.45
	800	15"	Cem.	
Eastern ave., easterly.....	248	10"	Clay	152.56
				35,241.39
Vassar st.. Harvard street,				
northerly .....	550	12"	Cem.	153.37
Ventura st., Sumner avenue,				
northerly .....	351	10"	Clay	289.51
Grenada terrace, northerly.	341	10"	Clay	199.50
				489.01
Vernon st. Water st., easterly	639	15"	Cem.	795.08
Main st., westerly .....	216	12"	Cem.	310.68
				1,105.76
Vine st., Main to Fulton st.	697	12"	Cem.	602.45
Vinton st. Liberty to Franklin				
st.....	357	12"	Clay	357.63
	262	10"	Clay	252.13
Walden st., Dickinson street,				609.76
easterly .....	166	8"	Clay	94.93

\*Elliptical.

## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut st south from State st.	69	1'-6"x 1'-6"	Brick	285.23
north from Charter ave .....	292	10"	Clay	418.30
Union to Charter ave .....	279	12"	Cem.	482.50
Union to Oak st. ....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st. ....	1,142	2'-0"x 3'-0"	Brick	4,956.57
Pine to Oak st. ....	272	18"	Cem.	410.04
Hancock to Cedar st. ....	784	15"	Cem. }	1,266.57
Hancock st., southerly .....	180	12"	Cem. }	
North from Manhattan st. ....	249	10"	Clay	212.25
Florence st., northerly .....	53	8"	Cem.	27.12
Hickory to Florence st. ....	1,026	12"	Clay	992.67
				<hr/> 36,657.00
Walter st. Birnie ave., easterly	285	12"	Cem.	70.53
Waltham ave., Wilbraham road, southerly .....	911	12"	Clay	938.30
Wareham st. Grand avenue, southerly .....	419	10"	Clay	21.34
Warner place, Fort Pleasant ave. to Longhill st. ....	506	12"	Clay }	....
	198	10"	Clay }	
	89	10"	Clay	51.88
				<hr/> 51.88
Warriner ave., Locust street easterly .....	448	12"	Clay	418.30
Washburn st. Conn. river to B. & M. R. R. ....	1,758	7'-0" cir.	Brick	21,678.46
Washington ave., Longhill st to Magnolia ter. ....	304	2'- 4"x 3'-6"	Brick }	5,032.68
	823	2'- 2"x 3'-3"	Brick }	
Wason ave., Conn. river to Plainfield st. ....	451	3'-10"x 5'-9"	Brick }	16,610.73
Plainfield st. to Fisk ave. ....	1,051	3'- 4"x 5'-0"	Brick }	
Fisk ave. to Birnie ave. ....	634	3'- 2"x 4'-9"	Brick }	
Birnie ave. to North Main st.	247	2'- 0"x 3'-0"	Brick }	
Water st Gardner to Loring st	474	1'-10"x 2'-9"	Brick	1,182.58
Loring st. northerly .....	345	12"	Cem.	237.36
Union to Margaret st	721	2'- 0"x 3'-0"	Brick }	2,284.34
Union st., northerly .....	868	18"	Cem. }	
Elm to State st. ....	275	18"	Cem.	508.75
Elm to Pyncheon st. ....	43	2'- 0"x 3'-0"	Brick	198.00
	498	2'- 6"x 3'-6"	Brick	2,949.29
Pyncheon st., northerly. ....	257	18"	Cem.	404.44
	329	15"	Cem.	460.60
	61	12"	Cem.	85.40
Worthington st., southerly ..	209	10"	Clay	333.54
Worthington to Hampden st.	327	15"	Cem.	457.80
Hampden to Railroad street	321	12"	Clay	658.58
Waverly st., North Main to Chestnut st. ....	473	20"	Clay }	9,746.76
	487	10"	Clay }	1,197.00

SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Weaver Ramble, Rimmon ave., westerly and northerly	480	12"	Clay	....
Webster st Liberty to Frank- lin st.....	601	12"	Clay	\$395.54
Welcome place, Bay street, northerly.....	238	8"	Clay	17.84
Wellesley st., Cornell street, easterly .....	373	12"	Cem.	94.76
Wellington ave., Wilbraham road, southerly.....	287 244 291	15" 12" 10"	Clay Clay Clay	23.58
Wendell ave Main st., easterly	458	15"	Clay	....
Westernview st Forest Park ave., easterly .....	468 138	12" 10"	Clay Clay	539.60
Westford avenue Wilbraham road, southerly.....	300 300 350	15" 12" 10"	Clay Clay Clay	\$676.23
* Westford circle to King st.	541	12"	Clay	454.36
Westminster st. Bay to State st.....	300 300 201	15" 12" 10"	Clay Clay Clay	1,130.59
St. James ave., southerly...	773	12"	Cem.	794.10
White st., Allen to Orange st	747 674 274	24" 20" 18"	Clay Clay Clay	1,717.86 1,490.97
Orange st. to Dawson ave...	388 292	15" 15"	Clay Clay	389.27 275.73
Gordon st. to Dawson ave..	192	10"	Clay	187.69
Gordon st. southerly.....	690 207	12" 8"	Clay Clay	671.32 84.45
Sumner avenue, southerly...	1,028	20"	Clay	1,719.01
Whitney ave., Water street, westerly.....	450	12"	Cem.	6,536.30 257.32
Whittier ave Sumner ave. to Longfellow terrace.....	301 299 301 221	18" 15" 12" 10"	Clay Clay Clay Clay	1,261.63
Wilbraham ave., Wilbraham road, southerly.. .....	1,125	12"	Clay	1,020.78
Alden st. to Beverly st.....	999 1,180	10" 8"	Clay Clay	1,121.36
Wilbraham road, State street, easterly .....	248	12"	Cem.	157.79
State st. to Northampton ave.	1,451	2'-0"x3'-0"	Brick	6,198.76

\*Sanitary sewer.



## SEWER CONSTRUCTION.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Northampton ave. to Bristol street.....	472	2'-6"x3'-9"	Brick	\$8,970.16
	476	2'-4"x3'-6"	Brick	
	478	2'-2"x3'-3"	Brick	
	473	2'-0"x3'-0"	Brick	
	254	1'-10"x2'-9"	Brick	
	256	1'-8"x2'-6"	Brick	
Bristol st., easterly.....	263	20"	Clay	859.35
	405	12"	Clay	
				\$16,146.06
Wilcox st., Water st., easterly	548	15"	Cem.	1,000.75
	327	12"	Cem.	
Water st., westerly.....	463	12"	Cem.	205.76
Willard avenue, State street, northerly.....	282	18"	Clay	785.26
	300	15"	Clay	
	241	12"	Clay	
	215	8"	Clay	
Shattuck ave., southerly....				785.26
William st. Water to Main st	908	12"	Cem.	952.89
Main to Dale st.....	351	12"	Clay	906.35
	288	10"	Clay	
Water st., westerly.....	76	15"	Cem.	459.79
	425	12"	Cem.	
				2,319.06
Willow st., Cross to State st.	413	12"	Clay	791.42
Cross to Park st.....	265	12"	Clay	378.17
Union to Park st.....	216	18"	Cem.	325.32
Union st., to Hubbard ave..	219	10"	Clay	204.39
Wilmont st. Dickinson st. to Revere st.....	349	18"	Clay	1,557.40
	450	15"	Clay	
	386	12"	Clay	
Winchester st.....	424	12"	Clay	357.96
Windsor st., Knox st., west- erly.....	80	15"	Cem.	....
	485	10"	Cem.	
Winthrop st., Main st., east- erly.....	52	18"	Cem.	220.81
	141	15"	Cem.	
	59	15"	Clay	
	461	2'-6"x3'-6"	Stone	132.30
Wolcott st., Armory street, northerly.....	220	10"	Clay	119.58
	104	10"	Clay	
Woodside ter., Belmont ave., northerly.....	451	10"	Clay	321.97
Forest Park ave., northerly	307	10"	Clay	....
				321.97

## SEWER CONSTRUCTION.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worcester ave., Plainfield to Binnic ave.....	1,486	15"	Cem.	\$53.14
Worcester st I. O., Myrtle to Chestnut st.....	4 290	24" 20"	Clay Clay	\$945.80
	382	2'-0"x3'-0"	Brick	
Chestnut to Holly street...	670	1'-10"x2'-9"	Brick	2,398.09
Oak st., easterly.....	275	12"	Clay	542.93
	212	10"	Clay	
Pine st., easterly.....	546	20"	Clay	768.42
	224	18"	Clay	344.66
	349	15"	Clay	510.13
Worthington st., submerged outlet .....	194 22	24" 24"	Wood C. Iron	1,883.04 176.25
*Conn. river to Main st....	1,038	5'-7"x7'-0"	Brick	33,410.12
*Main to Dwight st.....	821	5'-4"x7'-0"	Brick	
Dwight to Garden brook ...	566	4'-0"x6'-0"	Brick	4,361.35
Garden brook to Spring st...	738	4'-3" cir.	Brick	
Spring st., branch north....	35	5'-0" cir.	Brick	614.35
Spring st., branch south....	47	2'-0"x3'-0"	Brick	
Spring street, easterly .....	40	18"	Cem.	614.35
	242	15"	Cem.	
	251	12"	Cem.	118.78
Autumn st., westerly .....	113	12"	Cem.	
near Sacketts ave.....	145	10"	Cem.	111.47
West brook, easterly.....	329	15"	Clay	1,110.54
	217	12"	Clay	
West brook to Autumn st...	231	15"	Clay	727.56
Sacketts ave., westerly .....	98	12"	Clay	207.28
Sacketts ave. to Kibbe ave...	337	12"	Cem.	335.37
Kibbe ave. to Federal st ...	794	15"	Clay	826.90
Kibbe hollow, westerly to Magazine street.....	167	18"	Clay	381.28
near Magazine to Bowdoin st.	248	2'-8"x4'-0"	Brick	20,646.21
	354	2'-1"x3'-1 1/4"	Brick	
Bowdoin st. to St. James ave.	359	3'-4"x7'-2"	Brick	64,910.50
	1,307	3'-4"x6'-9"	Brick	
Yale st., Dartmouth to Prince- ton st.....	350	24"	Clay	1,770.13
	359	18"	Clay	
	233	15"	Clay	452.46
Princeton st., northerly...	712	12"	Clay	
York st .....	1,203	7'-0" cir.	Brick	2,222.59 13,912.27
Total .....	606,147			\$1,434,992.91

\*Elliptical.

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Segmental .....	93	6'- 0"x4'- 3"	Brick and cem. mortar.
Elliptical shaped.....	1,038	5'- 7"x7'- 0"	" " "
" " .....	821	5'- 4"x7'- 0"	" " "
" " .....	1,095	4'- 10"x7'- 3"	" " "
" " .....	1,949	4'- 8"x7'- 0"	" " "
" " .....	1,170	4'- 6"x6'- 9"	" " "
" " .....	1,040	4'- 4"x6'- 6"	" " "
" " .....	2,340	4'- 2"x6'- 3"	" " "
" " .....	1,746	3'- 8"x5'- 6"	" " "
" " .....	830	3'- 4"x5'- 0"	" " "
" " .....	536	3'- 2"x4'- 9"	" " "
" " .....	819	3'- 0"x4'- 6"	" " "
" " .....	1,093	2'- 10"x4'- 3"	" " "
" " .....	2,506	2'- 8"x4'- 0"	" " "
" " .....	5,778	2'- 2"x3'- 3"	" " "
" " .....	417	2'- 0"x3'- 0"	" " "
Egg shaped.....	566	4'- 0"x6'- 0"	" " "
" " .....	1,131	3'- 10"x5'- 9"	" " "
" " .....	1,074	3'- 8"x5'- 6"	" " "
" " .....	3,512	3'- 6"x5'- 3"	" " "
" " .....	359	3'- 4"x7'- 2"	" " "
" " .....	1,307	3'- 4"x6'- 9"	" " "
" " .....	8,787	3'- 4"x5'- 0"	" " "
" " .....	1,056	3'- 2"x4'- 9"	" " "
" " .....	2,877	3'- 0"x4'- 6"	" " "
" " .....	953	2'- 10"x4'- 3"	" " "
" " .....	364	2'- 9"x4'- 1 1/2"	" " "
" " .....	2,516	2'- 8"x4'- 0"	" " "
" " .....	4,818	2'- 6"x3'- 9"	" " "
" " .....	498	2'- 6"x3'- 6"	" " "
" " .....	150	2'- 5"x3'- 7 1/2"	" " "
" " .....	8,636	2'- 4"x3'- 6"	" " "
" " .....	8,688	2'- 2"x3'- 3"	" " "
" " .....	603	2'- 1"x3'- 1 1/2"	" " "
" " .....	20,825	2'- 0"x3'- 0"	" " "
" " .....	4,921	1'- 10"x2'- 9"	" " "
" " .....	3,132	1'- 8"x2'- 6"	" " "
" " .....	917	1'- 6"x2'- 3"	" " "
" " .....	669	1'- 4"x2'- 0"	" " "
Circular .....	3,017	7'- 0"	" " "
" " .....	3,019	6'- 6"	" " "
" " .....	1,330	6'- 0"	" " "
" " .....	1,743	5'- 9"	" " "
" " .....	3,842	5'- 6"	" " "
" " .....	949	5'- 3"	" " "
" " .....	2,257	5'- 0"	" " "
" " .....	3,274	4'- 7 1/2"	" " "
" " .....	1,762	4'- 6"	" " "
" " .....	3,362	4'- 3"	" " "

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	952	4'-1"	Brick and cem. mortar.
" .....	2,399	4'-0"	" " "
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	1,520	2'-0"	" " "
" .....	190	1'-6"	" " "
Elliptical .....	416	2'-10"x4'-3"	Brick-concrete.
" .....	245	3'-0"x4'-6"	" " "
Segmental .....	60	5'-0"x2'-1"	Concrete.
Elliptical .....	385	4'-10"x7'-3"	"
" .....	1,085	4'-2"x6'-3"	"
" .....	718	3'-2"x4'-9"	"
Egg shaped .....	352	2'-8"x4'-0"	"
" .....	1,365	2'-6"x3'-9"	"
" .....	191	2'-4"x3'-6"	"
" .....	648	2'-2"x3'-3"	"
" .....	1,557	2'-0"x3'-0"	"
Circular .....	1,004	4'-9"	"
" .....	1,940	2'-8"	"
" .....	1,021	2'-3"	"
" .....	306	2'-2"	"
" .....	1,440	2'-0"	"
" .....	25,935	24"	Clay pipe.
" .....	20,188	20"	" "
" .....	31,071	18"	" "
" .....	47,981	15"	" "
" .....	102,010	12"	" "
" .....	79,296	10"	" "
" .....	12,855	8"	" "
" .....	287	6"	" "
" .....	22,306	18"	Cement pipe.
" .....	40,284	15"	" "
" .....	62,728	12"	" "
" .....	5,079	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Miscellaneous shapes .....	270		Stone, brick, and mortar.
Total .....	606,147		

**GENERAL CLASSIFICATION, 1908.**

	<b>Feet.</b>	<b>Miles.</b>
Brick and cement mortar. . . . .	139,138	26.352
Brick-concrete. . . . .	661	.125
Concrete. . . . .	12,072	2.286
Clay pipe. . . . .	319,623	60.535
Cement pipe. . . . .	131,219	24.852
Cast-iron pipe. . . . .	148	.028
Wood pipe. . . . .	1,016	.192
Miscellaneous materials. . . . .	2,270	.430
<b>Total. . . . .</b>	<b>606,147</b>	<b>114.800</b>

**SUMMARY OF SEWERAGE STATISTICS.**

( In form recommended by Sanitary Section of Boston Society  
Civil Engineers.)

*For the Year Ending December 1, 1908.*

**SPRINGFIELD, MASSACHUSETTS.****GENERAL.**

Population by census of 1906. . . . .	75,000
Total area of city or town. . . . .	38 square miles
Area served by sewerage system. . . . .	7 " "
\ For sewage only. . . . .	0.53 miles
Collection system. \ For sewage and surface water. . . . .	114.01 miles
\ For surface water only. . . . .	0.52 miles
Method of disposal,—Gravity flow to Connecticut River.	

COLLECTION.

MAINS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS).

	For sewage only.	For sewage and surface water.	For surface water only.
1. Lineal feet stone, . . . .		2,460	
2. " " brick, . . . .		138,948	
3. " " concrete, . . . .		12,012	
" " miscellaneous, . . . .		1,825	
4. " " pipe, . . . .	2,822	446,722	2,758
5. " " extended during year, . . . .	1,852	17,516	447
6. Number of inverted siphons, . . . .		1	
8. Method of flushing: By connections with the water system and one automatic flush tank.			
9. Method of cleaning: By scrapers and flushing.			
10. Number of automatic flushing tanks, . . . . .		1	
11. Number of direct connections with water mains for flushing, . . . .	1	425	
12. Number of flushings of entire sys- tem during year, . . . . .		26	
13. Cost of flushing, per mile, . . . .		\$19.30	
14. " " cleaning " " . . . .		\$13.26	
17. Number of storm overflows, . . . .		15	
18. Method of ventilation: By man- holes and well holes and through house stacks.			

HOUSE CONNECTIONS.

1. By whom made:	In the street by Sewer Department.
2. Sizes, . . . . .	6" and 8"
3. Number made during year, . . . . .	425
4. Lineal feet laid during year, . . . . .	About 10,625
7. Average cost per foot, connections made during year, . . . . .	\$0.35

**FINANCIAL.****CONSTRUCTION.**

<b>RECEIPTS.</b>		<b>EXPENDITURES.</b>	
Balance of previous year, \$	.....	Collection works:—	
Bonds issued, . .	44,878.62	(a) Mains, . . .	\$60,875.65
Appropriation, . .	25,000.00	(b) House connections,	4,151.21
Entrance fees, . .	12,635.81		
House connections, .	5,139.25		
By bills rendered, .	1,386.67		

**MAINTENANCE AND OPERATION.**

Balance of previous year, \$	.....	Administration, . .	\$ 2,448.19
		Tools and supplies, and materials, . .	1,459.83
Appropriation, . . .	.....	Repairs, . . .	1,344.87
		Teams, City Yard and engineering, . .	2,269.48
Assessments, . . .	.....	Cleaning sewers, . .	1,525.28
Rentals, . . .	.....	" catch basins, *	1,531.57
Other sources, . . .	.....	Flushing sewers, . .	2,220.32
		Work chargeable, . .	2,143.23
		Unclassified expenses,	589.55
		Transfer, . . .	3,000.00
		Balance, . . .	2,504.31
		" special account, . . .	3,988.43
Total, . . .	\$88,540.35		\$88,540.35
		Amount paid in interest, 1908, . .	6,915.00
		Amount placed in sinking fund, 1908, .	5,140.00

\* Paid from Street Department funds.

## GENERAL.

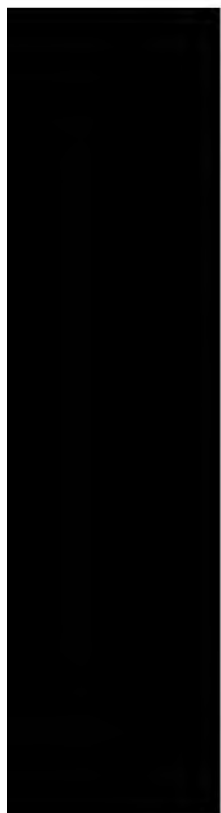
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Total cost of collecting mains to date, . . . . .	\$1,434,992.91
Bonded debt at date, . . . . .	262,000.00
Value of sinking fund at date, . . . . .	31,962.41
Average rate of interest on bonds, . . . . .	4 $\frac{5}{8}$ % —
Proportion of cost of system paid for by abutters in fees, . . . . .	25 $\frac{5}{8}$ % +
Method of assessing abutters and rate of assessment: —	

Entrance fee of \$25 per tenement on ground floor for dwellings.

For business blocks one story in height, one (1) cent per square foot of area covered by building, and for business blocks two or more stories in height one and three-fourths ( $1\frac{3}{4}$ ) cents per square foot of area covered by the building.





COMPLIMENTS OF

ARTHUR A. ADAMS,

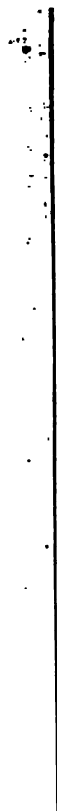
Superintendent of Stre



COMPLIMENTS OF

ARTHUR A. ADAMS,

Superintendent of Streets and Sewers



**Annual Report**

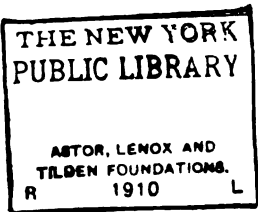
**Superintendent of  
Streets and Sewers**

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**Springfield, Massachusetts**



**For the Year 1909**



# FORTY-FIRST ANNUAL REPORT OF THE STREET DEPARTMENT

SPRINGFIELD, MASS., December 23, 1909.

*To the City Council:—*

In accordance with the requirements of Chapter 19, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department and descriptions of work done during the fiscal year ending December 1, 1909.

## FINANCES IN GENERAL

### REGULAR ACCOUNTS

#### RECEIPTS

Highways and Bridges.....	\$220,602.00	
Walks and Curbing.....	24,035.62	
Watering Streets.....	34,856.17	
Ashes Collection.....	35,928.25	
Garbage Collection.....	22,209.50	
		\$337,631.54

#### EXPENDITURES

Highways and Bridges.....	\$219,151.60	
Walks and Curbing.....	23,886.23	
Watering Streets.....	34,742.14	
Ashes Collection.....	35,887.41	
Garbage Collection.....	21,647.07	
		\$335,314.45

#### UNEXPENDED BALANCES

Highways and Bridges.....	\$1,450.40	
Walks and Curbing.....	149.39	
Watering Streets.....	114.03	
Ashes Collection.....	40.84	
Garbage Collection.....	562.43	
		\$2,317.09



*Report on Streets***SPECIAL ACCOUNTS****ABBE AVENUE OVERHEAD CROSSING**

Limit of expenditure.....	<b>\$61,667.34</b>
Receipts.....	<b>8.44</b>
	<hr/>
	<b>\$61,675.78</b>
Expenditures.....	<b>\$61,675.78</b>
	<hr/>

**CITY YARD, SUMMER STREET**

Limit of expenditure.....	<b>\$41,753.00</b>
Expenditures.....	<b>41,578.20</b>
	<hr/>
Unexpended balance.....	<b>\$174.80</b>

**PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS**

Limit of expenditure.....	<b>\$32,117.00</b>
Expenditures.....	<b>23,994.27</b>
	<hr/>
Unexpended balance.....	<b>\$8,122.73</b>

**WATER STREET EXTENSION**

Limit of expenditure.....	<b>\$96,145.16</b>
Expenditures.....	<b>86,612.02</b>
	<hr/>
	<b>9,533.14</b>
Transferred to Highways and Bridges.....	<b>5,000.00</b>
	<hr/>
Unexpended balance.....	<b>\$4,533.14</b>

## WORK IN GENERAL

Streets .....	{	Grading and graveling .....	4182 feet
		Macadamizing .....	15,219 feet
		Macadam resurfacing .....	17,824 feet
		Granite block paving .....	228 feet
		Wood block paving .....	2957 feet
		Bitulithic paving .....	178 feet
		Gravel resurfacing .....	600 feet
Street cleaning ...	{	Bitulithic paving resurfacing .....	3363 feet
		Gravel .....	20.49 miles
		Macadam .....	65.70 miles
Sidewalks .....	{	Paving .....	10.88 miles
		Brick (new) .....	2386 feet
		Brick (relaid) .....	5229 feet
		Tar concrete (new) .....	5032 feet
Curbing .....	{	Tar concrete (resurfaced) .....	415 feet
		Set .....	11,083 feet
Crosswalks—new .....	{	Reset .....	10,191 feet
Streets watered .....			35
Ashes collected .....			89.85 miles
Garbage collected .....			26,559 loads
			about 1790 cords

**FINANCES ITEMIZED****HIGHWAYS AND BRIDGES****RECEIPTS.**

Appropriation.....	<b>\$144,000.00</b>
Springfield Street Railway Company,	
Corporation tax.....	<b>26,158.35</b>
Excise tax.....	<b>13,608.62</b>
Bills rendered departments and private parties....	<b>31,604.06</b>
Amounts uncollected on pay rolls.....	<b>224.75</b>
Rebate on insurance.....	<b>6.22</b>
Transfer from Water Street Extension.....	<b>5,000.00</b>
	<hr/>
	<b>\$220,602.00</b>

**EXPENDITURES**

Automobile, repairs and supplies.....	<b>\$598.99</b>
Bridges, repairs and care.....	<b>6,845.85</b>
City teams, horses, harnesses and wagons.....	<b>645.66</b>
City Yard, Logan street.....	<b>115.44</b>
Operating, etc.....	<b>2,532.92</b>
City Yard, Summer street.....	<b>252.02</b>
Wagon shed.....	<b>21.93</b>
Engineering.....	<b>527.69</b>
Foremen's winter and holiday pay.....	<b>1,494.05</b>
Material uncredited.....	<b>344.75</b>
Office and general expenses.....	<b>3,088.61</b>
Salary of Superintendent.....	<b>2,800.04</b>
Salary of second assistant superintendent, part....	<b>1,038.24</b>
Macadamizing.....	<b>4,531.67</b>
Street construction.....	<b>27,803.61</b>
Grading and graveling.....	<b>32,566.26</b>
Paving.....	<b>33,154.30</b>
Cleaning.....	<b>1,039.60</b>
Cleaning equipment....	<b>23,226.09</b>
General repairs.....	<b>273.78</b>
Street maintenance.....	<b>14,974.62</b>
Gravel resurfacing....	<b>6,003.14</b>
Macadam resurfacing....	<b>23,872.01</b>
Paving resurfacing....	
Winter expense.....	

*Report on Streets*

7

Tools and supplies.....	\$1,372.86	
Work and material charged to departments.....	17,404.32	
Work and material charged to private parties....	12,623.15	
	<hr/>	
	219,151.60	
Unexpended balance.....	1,450.40	
	<hr/>	\$220,602.00

**BILLS RECEIVABLE**

Bills receivable, November 30, 1908.....	\$1,129.49	
Bills committed fiscal year 1909.....	30,197.17	
	<hr/>	\$31,326.66
Bills paid fiscal year 1909.....	29,783.82	
Abatements.....	92.81	
	<hr/>	\$39,876.63
	<hr/>	
Bills receivable November 30, 1909.....		\$1,450.03

**WALKS AND CURBING****RECEIPTS**

Appropriation.....	\$9,000.00	
Bills rendered abutters for work done previous to 1909.....	6,910.55	
Bills rendered abutters for work done during 1909.....	8,125.07	
	<hr/>	\$24,035.62

**EXPENDITURES**

Crosswalks, new and relaid.....	\$3,923.25	
Engineering.....	332.39	
Foremen's winter and holiday pay.....	91.06	
Office and general expenses.....	476.15	
Salary of second assistant superintendent, part...	461.44	
Setting and resetting curbing.....	4,987.72	
Sidewalk repairs not chargeable.....	546.38	
Tools.....	132.90	
Work and material charged to abutters.....	8,447.65	
Work and material charged to departments.....	2,839.52	
Work and material charged to the City.....	1,647.77	
	<hr/>	
	23,886.23	
Unexpended balance.....	149.39	
	<hr/>	\$24,035.62

*Report on Streets***BILLS RECEIVABLE**

Bills unpaid November 30, 1908.....	\$6,654.04	
Bills committed fiscal year 1909.....	11,232.61	
		<hr/>
		\$17,886.65
Bills paid fiscal year 1909.....	15,035.62	
Abatements.....	249.44	
		<hr/>
		\$15,285.06
		<hr/>
Bills receivable November 30, 1909.....		\$2,601.59

**WATERING STREETS****RECEIPTS**

Appropriation.....	\$5,000.00	
Watering streets assessments.....	26,351.80	
Springfield Street Railway Company, by agreement.....	2,283.37	
Bills rendered.....	21.00	
Transfer from contingencies.....	1,200.00	
		<hr/>
		\$34,856.17

**EXPENDITURES**

General expenses.....	\$331.96	
Standpipes, and car hydrants—construction main- tenance, opening and closing.....	1,121.70	
Standpipe bases—construction and maintenance..	54.27	
Watering carts, storage, painting and repairs.....	1,230.14	
Use of teams as per pay rolls.....	773.99	
Use of teams as per contracts.....	16,231.85	
American Car Sprinkling Company, as per con- tracts.....	9,606.10	
Inspector.....	953.38	
Inspector's horse and carriage.....	151.18	
Tools and materials.....	42.07	
Dust laying materials and labor.....	4,245.50	
		<hr/>
	34,742.14	
Unexpended balance.....	114.03	
		<hr/>
		\$34,856.17

**ASHES COLLECTION****RECEIPTS**

Appropriation.....	\$33,000.00	
Sundry receipts.....	28.25	
Transfer from Garbage Collection.....	2,900.00	
		<hr/>
		\$35,928.25

*Report on Streets*

9

**EXPENDITURES**

Pay rolls.....	\$32,102.59
Contract .....	926.58
Provender .....	1,821.66
Shoeing and veterinary .....	303.50
Wagon, sleigh and harness repairs .....	415.72
Tools .....	105.27
Covers .....	22.00
General expense and lighting.....	51.83
South end barn, repairs .....	138.26

\$35,887.41Unexpended balance.....40.84**\$35,928.25****GARBAGE COLLECTION****RECEIPTS**

Appropriation.....	\$18,000.00
Garbage sold.....	<u>4,209.50</u>

**\$22,209.50****EXPENDITURES**

Payrolls.....	\$14,710.86
Provender .....	2,810.34
Shoeing and veterinary.....	363.20
Barn repairs .....	71.45
Wagon, sleigh and harness repairs.....	385.58
Tools and supplies .....	166.35
Covers .....	27.00
Telephone and lighting.....	32.44
General expenses .....	179.85

\$18,747.07Transferred to Ashes Collection.....2,900.00\$21,647.07Unexpended balance.....562.43**\$22,209.50****ABBE AVENUE OVERHEAD CROSSING****LIMIT OF EXPENDITURE**

By order of the City Council.....	\$61,439.00
Receipts, sale of lumber, etc.....	<u>236.78</u>

**\$61,675.78****EXPENDITURES**

Previously reported.....	\$61,667.34
Resetting posts.....	<u>8.44</u>

**\$61,675.78**

*Report on Streets***CITY YARD, SUMMER STREET**

Limit of expenditure, previously reported.....	<u>\$41,753.00</u>	<b>\$41,753.00</b>
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**EXPENDITURES**

Previously reported.....	\$36,753.01	
Balance of contract.....	<u>4,825.19</u>	
	<b>\$41,578.20</b>	
Unexpended balance.....	<u>174.80</u>	<b>\$41,753.00</b>

**PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS**

Limit of expenditure, previously reported.....	<b>\$32,117.00</b>
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**EXPENDITURES**

Previously reported.....	\$21,417.42	
Balance of Culgin Pace Company's contract for bridge.....	<u>2,067.80</u>	
Building walks, taking down trees, engineering and miscellaneous .....	<u>519.05</u>	
	<b>\$23,994.27</b>	
Balance unexpended.....	<u>8,122.73</u>	<b>\$32,117.00</b>

**WATER STREET EXTENSION**

Limit of expenditure, previously reported.....	<u>\$96,145.16</u>	<b>\$96,145.16</b>
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**EXPENDITURES**

Previously reported.....	\$77,176.15	
Macadamizing.....	6,099.73	
Land.....	2,576.00	
Walks and curbing.....	526.20	
Engineering and miscellaneous.....	<u>233.94</u>	
	<b>\$86,612.02</b>	
Transferred to Highways and Bridges.....	<u>5,000.00</u>	
	<b>\$91,612.02</b>	
Unexpended balance.....	<u>4,533.14</u>	<b>\$96,145.16</b>

## WORK ITEMIZED

## BRIDGES

## REPAIRS AND CARE

	Description of Work	Cost
Abbe avenue overhead crossing,	Floor repairs,	\$274.75
Armory street, over B. & A. Rail- road,	Floor repairs,	169.05
Armory street, over N. Y., N. H. & H. Railroad,	Floor repairs,	181.17
Berkshire street, Red House, cross- ing,	Floor repairs,	94.83
Ludlow, I. O.,	Floor and walk repairs,	339.61
Main street, I. O.,	Floor repairs,	53.92
North end, over Conn. River,	Cleaning and painting,	4,257.91
Old Toll,	Floor repairs,	552.55
Pasco street, I. O.,	New top floor,	228.83
Plainfield street,	New top floor,	208.85
South end, over Conn. River and N. Y., N. H. & H. R. R.	Cleaning and painting,	481.52
St. James avenue,	Floor repairs,	2.86
		<hr/> \$6,845.85



## STREET CONSTRUCTION

Fiscal year 1909

## GRADING AND GRAVELING

Street	Limits	Length in feet	Area in sq yds	Total Cost
*Chicopee road, Dickinson street, Holly street, I. O., Melrose street,	St. James avenue to Carew street, Widening westerly side, Worcester street to Berkshire street, Walnut street easterly and southerly,	2,677 1,060 445	2,974 4,240 1,450	\$1,989.64 1,473.01 843.50 225.52
		4,182	8,664	\$4,531.67

\*Incomplete.

# Report on Streets

13

## MACADAM

Street	Limits	Length in feet	Area in sq yds	Cost per sq yd	Total Cost
Allen street,	Extension to N. E. R. R.,	1,270	4,233	.595	\$2,518.84
Arch street,	Main street, westerly,	410	1,366	.90	\$1,234.61
Beechwood street,	Sumner to Spruceland avenue,	501	1,670	.69	1,166.03
Berkshire street, I. O.,	Oak to Chestnut street,				*800.33
Hall street,		992	3,307	.56	1,846.85
Hancock street,	Florence to Clark street,	560	1,866	.566	1,057.37
Hickory street,	Extension, easterly,	1,369	3,042	.866	**2,637.75
Longhill street,	Sumner avenue to Washington boulevard,	1,741	6,837	.53	3,592.05
Plainfield street,	Extension, southerly to Newland street,	1,230	4,100	.77	\$3,165.16
Randolph street,	Forest Park avenue to Maplewood terrace,	633	2,110	.62	1,314.81
Reed street,		660	2,493	.50	1,260.75
Spruceland avenue,		1,370	4,566	.62	2,810.81
Stebbins street,	State to Union street,	787	2,622	.39	1,027.27
Terrence street,		714	2,380	.56	1,330.50
Thomas street,		583	1,945	.53	1,032.65
Woodside terrace,	Belmont avenue, easterly,	474	1,580	.65	1,027.83
		13,294	44,117		\$27,803.61
Water street,	Mill River bridge to Gardner street, 27 ft. wide, special appropriation,	1,925	5,775		**9,708.58
		15,219	49,892		\$37,512.19

\*Additional payment covering final cost of this work will be made in fiscal year 1910.

\*\*Cost includes grading and inlets.

†Includes cost of grading.

## STREET CONSTRUCTION

## PAVING

Street	Limits	Material	Length in feet	Area in sq yds.	Cost per sq yd.	Total Cost.
Barnes street	Bridge to Hillman street,	Bitulithic,	178	552	\$2.50	\$1,381.25
Chestnut street,	Essex to Everett street,	Wood blocks,	419	1,438	3.38	4,864.30
Lyman street,	Extension easterly to Spring street,					
North Main street,	Morgan to Bancroft street,	Granite blocks	228	949	1.24	1,181.66
State street	Main street, westerly,	Wood blocks,	879	4,544	*	3,856.62
State street,	Oak to Stebbins street,	Wood blocks,	598	2,357	3.21	7,575.87
Worthington street,	Broadway to Water street,	Wood blocks,	762	3,031	3.29	9,964.88
Worthington street,	Turnout paved 1908, balance,	Wood blocks,	299	1,061	3.36	3,597.69
						174.09
			3,363	13,932		\$32,566.26

\*Additional payments covering final cost of this work will be made in the fiscal year 1910.

# Report on Streets

15

## STREET MAINTENANCE

Fiscal Year 1908

### MACADAM RESURFACING

Street	Limits	Length in feet	Area in sq yds	Cost per sq yd	Total Cost
Bay street,	Catherine street to N. Y., N. H. & H. R. R.,	1,214			\$223.12
Belmont avenue,	Oakland street to top of hill,	2,385	5,830	.11	615.02
Central street,	Pine to Maple street,	1,460	5,866	.12	683.57
Hickory street,	Alden street, easterly	300	1,000	.49	492.72
Mill street,	Locust to Pine street,	1,040	3,812	.24	983.89
Pecousic avenue,	South end bridge, southerly	1,030	2,746	.18	509.40
Pecousic avenue,	South end bridge, northerly (tar),	1,115	2,973	.66	1,960.92
Pine street,	Maple to Mill street,	1,000	3,333	.16	518.93
Pine street,	Cedar to Walnut street,	1,600	5,333	.32	1,689.69
Plainfield street,	Washburn to West st., completion, 1908 work,				553.26
State street,	Benton street, easterly and westerly,	4,110	22,245	.11	2,516.46
Water street,	Bliss street to Gardner street,	2,310	7,700	.45	3,499.55
Water street,	State to Bliss street, (tar),	260	866	.89	768.09
		17,824	61,704		\$14,974.62

### GRAVEL RESURFACING.

Street	Limits	Length in feet	Area in sq. yds.	Cost per sq. yd.	Total cost
Hampden street, I. O.,	Chestnut to Holly street,	600	2,400	.11	\$273.78

## STREET MAINTENANCE

## PAVING RESURFACING

Street	Materials	Area in sq ds	Cost per sq yd	Total Cost
Chestnut street.	Bitulithic,	1,446	.85	\$1,229.27
Hampden street,	Bitulithic,	360	.85	306.34
Hillman street,	Bitulithic,	35	.85	29.92
Market street,	Bitulithic,	455	.85	388.41
North Main street,	Bitulithic,	626	.85	531.76
State street,	Bitulithic,	1,902	.85	1,616.90
Walnut street,	Bitulithic,	2,238	.85	1,902.84
		7,062		\$6,003.14

STREET MAINTENANCE  
GENERAL REPAIRS

Street	Gravel	Macadam	Receiving Basins	Miscellaneous	Total Cost
s street,		\$11.97	\$24.63		\$36.60
y street,				\$155.77	155.77
street,		27.63			27.63
nan street,			30.14		30.14
street,	\$836.35	13.50		56.39	906.24
street,		39.81			39.81
y street,	162.21	26.75	6.13		195.09
place,		49.87			49.87
s street,			28.46		28.46
ad,	71.69				71.69
reet,	48.45	87.00			135.45
nt ave.	67.58	996.70	3.37		1,067.65
ire st. I.					
	452.37			42.09	494.46
im bend,	48.25			6.41	54.66
avenue,		35.50			35.50
treet,		21.17			21.17
street,		25.51			25.51
road,	1,411.21			115.25	1,526.46
in street,	27.57		18.69		46.26
street,		42.06		29.11	71.17
ingham st.	26.97				26.97
street,		6.13	80.67		86.80
street,	28.91	118.89	3.18		150.98
treet,		112.00	16.34		128.34
al street,		34.16	24.01	63.01	121.18
vale ave.	28.50				28.50
ut street,					
,		24.49	45.68	97.72	167.89
ut street,	21.50			2.62	24.12
onwealth					
ue,	4.96		99.60		104.56
ess street,		60.51			60.51
ll street,	29.43				29.43
Square					
ue,				68.57	68.57
al avenue,	20.90		10.46		31.36
treet,		16.94	3.49		20.43
street,	42.99				42.99
ison st.,	322.83	4.00		2.75	329.58
ester st.,		3.96	64.14		68.10
it street,			36.89	25.29	62.18
Court st.,		35.03			35.03
n avenue,		561.81	20.58		582.39
reet,		13.69		11.94	25.63
street,		6.12	19.05	122.58	147.75
st., I. O.,	150.83				150.83
it street,			4.26	83.06	87.32
street,		41.75		3.38	45.13

# STREET MAINTENANCE

## GENERAL REPAIRS—CONTINUED

Street	Gravel	Macadam	Receiving Basins	Miscellaneous	Total Cost
Fiberloid st., I. O.,	\$18.11			\$4.59	\$22.70
Firglade ave.,	52.20				52.20
Fisk avenue,		\$68.31	\$5.05		73.36
Fort Pleasant av.	109.90	116.00	3.49	37.65	267.04
Franklin street,		30.38		13.38	43.76
Fremont street,		39.28			39.28
Fulton street,		34.59		54.91	89.50
Gardner street,		61.48			61.48
Girard avenue	38.68				38.68
Granville street,	20.22				20.22
Greene street,	25.72				25.72
Greenleaf street,	32.30				32.30
Hampden street I. O.,	42.86		24.49	1.41	68.76
Hancock street,	20.83	213.66			234.49
Harrison avenue,		10.38		405.33	415.71
Hawley street,	24.52				24.52
Hickory street,				295.50	295.50
Holly st., I. O.,	9.49		19.24		28.73
Howard street,		25.87	.80		26.67
Hyde avenue,			34.55		34.55
Ingersoll Grove,	33.62				33.62
Liberty street,	245.68	814.82	84.55	90.78	1,235.83
Locust street,		28.25	3.49		31.74
Lombard street,		21.57			21.57
Longhill street,	30.25			193.76	224.01
Loring street,		34.52	8.32		42.84
Lyman street		8.88		22.82	31.70
Main street,		90.53	233.71	290.65	614.89
Main st., I. O.,	93.60	120.60		9.51	223.71
Maple street,		3.84	13.66	259.21	276.71
Marango Park	24.70				24.70
Marion street,	30.04		3.06		33.10
Massasoit st.,	3.43		20.74		24.17
Maynard street,	4.90		28.43		33.33
Mill street,		14.37	37.93		52.30
Morris street,		47.55	18.42		65.97
Myrtle st., I. O.	93.00				93.00
North street		25.75			25.75
Northampton avenue,	80.06		11.62		91.68
North Main st.,		426.19	6.97		433.16
Norwood street,		26.26	10.89		37.15
Oak street,		24.25	3.48		27.73
Oak st., I. O.,	199.74	43.88	4.00	5.58	253.20
Oakland street,		14.25	11.93		26.18
Orange street,	33.20				33.20
Park street,		52.38			52.38
Parker street,	699.74			19.17	718.91

# STREET MAINTENANCE

## GENERAL REPAIRS—CONTINUED

Street	Gravel	Macadam	Receiving Basins	Miscellaneous	Total Cost
sic avenue				\$80.34	\$80.34
eton ave.,		\$42.25	\$7.99		50.24
street,		57.13	17.11		74.24
field st.,		95.13	53.17		148.30
Tree road,	\$26.19				26.19
ion street,		19.87	7.31	8.49	35.67
i street,	23.27				23.27
olph street,			24.53		24.53
e street,	28.50				28.50
lieu court,			21.35		21.35
view ter.,	56.25				56.25
mes ave.,	125.10	98.98	6.29	59.90	290.27
rd street,		27.25	14.27		41.52
n street,		26.59	3.49		30.08
uck ave.,		81.54			81.54
en Acre					
d,	332.87				332.87
g street,		56.44	2.63		59.07
gfield st.,	14.48	250.13		2.50	267.11
street,		1,175.03	5.18	25.31	1,205.52
ins street,				32.80	32.80
bridge st.,		6.75		27.14	33.89
Hill road,	21.31				21.31
ner street,		12.25	6.24	26.67	45.16
er avenue,	160.83	124.96	20.79		306.58
lry streets,	508.47	506.84	781.31	193.88	1990.50
or street,		49.38		9.72	59.10
am road,	284.92				284.92
street,	88.17				88.17
i street,	4.92	55.99	166.87		227.78
ont street,			49.75		49.75
ut street,		68.43	12.51	55.46	136.40
burn st.,	51.07				51.07
ington Blvd.	22.80				22.80
n avenue,		48.91			48.91
r street,		185.23	58.08	31.78	275.09
s street,	107.35	101.62	119.44	13.72	342.13
aham ave.,	100.61				100.61
aham road	1,028.82	12.26	9.40		1,050.48
x street,		33.58	11.36		44.94
um street,	22.09	28.06	8.68		58.83
w street,		130.03	6.97		137.00
hrop street,		15.60	12.69		28.29
ester st., I.					
	224.48	10.12		21.21	255.81
hington st.,		184.26	41.06	105.59	330.91
street,		22.14			22.14
	\$9,002.79	\$8,341.54	\$2,597.06	\$3,284.70	\$23,226.09

Individual street repairs costing less than \$20.00.



SIDEWALKS AND CURBING  
Fiscal year 1909  
CONSTRUCTION AND RECONSTRUCTION  
By orders of the City Council

Street	Length in feet	SIDEWALKS		CURBING Length in feet 4"	Order Approved
		Material	Description	6"	
Continental street,				900	Sept. 22, 1908.
Crystal avenue,				1,184	Sept. 15, 1908.
Demond avenue,					June 15, 1909.
Dickinson street,	1,710	Brick,	Relaid,		Sept. 29, 1908.
Fisk avenue,	970	Tar concrete,	New,	385	Oct. 13, 1908.
Liberty street,	430	Brick,	New,		Nov. 10, 1908.
Liberty street,	1,996	Tar concrete,	New,	2004	May 18, 1909.
Melrose street,	797	Brick,	New,	885	June 15, 1909.
Park street,	616	Brick,	Relaid,		June 3, 1909.
*Pecousic avenue,	1,159	Brick,	New,		May 1, 1909.
Phoenix street,	1,016	Tar concrete,	New,	1,310	Nov. 10, 1908.
Silver street,	800	Tar concrete,	New,	1,130	May 18, 1909.
Stebbins street,	479	Brick,	Relaid,	920	June 21, 1908.
Willard avenue,	150	Tar concrete,	New,		Oct. 13, 1908.
Willard avenue,	415	Tar concrete,	Skim-coated,		Oct. 13, 1908.
				7,408	
				1,310	

\*Incomplete.

# SIDEWALKS AND CURBING

## CONSTRUCTION BY ORDERS OF ABUTTERS

Street	Length in feet	SIDEWALKS		CURBING Length in feet	
		Material	Description	4"	6"
*Alfred street,				41	
Arch street,				108	
Beacon street,				50	
Birnie avenue,				102	
Bloomfield street,				149	
*Donald street,				45	
Hamburg street,				71	
*Hancock street,				160	
Kensington avenue,				130	
Liberty street,	100	Tar concrete,	New,		
Longhill street,				309	
Main street,					54
*Main street, I. O.,				57	
Market street,					63
Massasoit street,				48	
North Main street,	50	Brick,	Relaid,		
Spring street,	50	Brick,	Relaid,		
State street,				417	
Water street,	2,324	Brick,	Relaid,		
*Wolcott street,				561	
				2,248	117

\*Curbing furnished by owner of abutting property.

## STREETS MADE PUBLIC

Name	Limits	Length in feet	Width in feet
Acushnet avenue,	Extension easterly,	216	48
Albany street,	Armory street, to St. James ave.,	4,411	18-40-50
Alfred street,	North Main street to Birnie ave.,	490	50
Cumberland street,	North Main street to Chestnut st.,	798	50
Daytona street,	Sumner avenue to Belmont ave.,	574	50
Firglade avenue,	Extension southerly to Washing- ton Boulevard,		
	Armory street to Penacook ave.,	549	60
Governor street,	Sumner ave. to Morningside Park,	1,407	50
Irvington street,	Dickinson st. to Pasadena st.,	813	60
Johnson street,	Oakland st. to Pasadena st.,	1,919	50
Kensington street,	Wilbraham road to Marlborough street,	1,784	50
Middlesex street,	Carew to Liberty street,	775	50
North st. extension,	Harriet st. to Cumberland st.,	2,244	60
North st. extension,	White street to Alderman street,	302	50
Pasadena street,	Maplewood ter. to Forest Park av.	1,292	50
Randolph street,	Riverview ter. to Forest Park ave.,	658	50
Riverview street,	Pineywoods ave. to Forest Park,	659	60
Washington Blvd.,		547	60
3.681 miles		19,488	

## STREETS RELOCATED AND WIDENED

Name	Limits	Length in feet	Width in feet
Court street,	From angle westerly to Water st.,	85	49.5
Melrose street,	Walnut street, easterly and south- erly,	490	38
Oak street, I. O.,	Near Boston & Albany R. R.,	219	
Parker st., I. O.,			
		794	

INVENTORY.

STREET AND SEWER DEPARTMENTS

**lands.**

City Yard, Logan street.....	\$8,500.00
City Yard, Summer street.....	27,600.00
Gravel bank, Five Mile pond.....	100.00
Gravel bank, Boston road.....	80.00
Gravel bank, Island pond.....	380.00
Trap rock quarry, Westfield.....	225.00

**buildings and structures.**

Barn, wagon house and shed.....	16,540.00
Scales.....	318.00
Trap rock bins and trestle.....	9,500.00
Engine, engine house, trap rock crusher and tools.....	1,000.00
Steam roller house.....	1,000.00

**horses, wagons, etc.**

Automobile.....	1,400.00
Fifteen horses.....	2,475.00
Two mules.....	400.00
Harness, blankets, etc.....	468.45
Fifteen wagons and carts.....	1,787.00
Nine sleighs, sleds, etc.....	488.60
Provender.....	542.00

**special tools and machines.**

Horse rollers.....	195.00
Six steam rollers.....	8,600.00
Concrete mixer.....	1,000.00
Hoisting engine.....	665.00
Macadam scraper.....	280.00
Road machines.....	100.00
Sanding machines.....	100.00
Scarifier.....	500.00
Sewer pumps and portable boiler.....	75.00
Street sweepers and cleaning equipment.....	990.97

**street and sewer materials.**

Castings and patterns.....	370.73
Cement.....	27.01
Coal, oil, tanks, etc.....	129.77
Lumber.....	2,217.48
Sand and sand tickets.....	17.20
Trap rock.....	382.50
Paving bricks and wood blocks.....	1,949.63
Vitrified clay pipe.....	318.28

**street watering equipment.**

Thirty-four wagons.....	5,014.00
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**Tools and supplies miscellaneous.**

Lanterns, globes, etc.....	\$62.50
Machine shop tools and stock.....	936.93
Sidewalk materials and tools.....	2,100.00
Street and sewer materials and tools.....	3,339.78
Office Furniture.....	312.00
	<hr/>
	<b>\$102,487.83</b>

**ASHES AND GARBAGE COLLECTIONS****Land and Buildings.**

State street, land and buildings.....	\$5,000.00
South end barn.....	800.00

**Horses, wagons, etc.**

Twenty-five horses.....	3,440.00
Twenty-four wagons.....	2,710.00
Twenty sleighs.....	1,480.00
Harness, blankets, etc.....	369.00
Provender.....	400.00

**Tools and supplies.**

Twenty-eight barrel carriers.....	32.00
Twenty-six garbage pails.....	40.00
Eighteen wagon covers.....	32.00
Small tools.....	110.00

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**\$14,413.00**
**GENERAL DESCRIPTIONS**

The work of the Department has included, as heretofore, the maintenance and construction of streets, watering streets and laying and repairing sidewalks, all of which is described in detail elsewhere.

By order of the City Council, approved February 15, 1909, the collection of ashes and garbage has been placed in the care of this department. The reason for this change was to effect certain economies in the conduct of the work, such as the employment on ashes collection of teams owned by the City, during the season of the year when little street work is in progress.

As will be seen by reference to the table of finances, the total expenditures of the Street Department during the year 1909 amounted to \$352,152.36, which, together with the expen-

ditures on account of Sewers and Drains, also in the care of this Department, amounted to \$409,719.00.

#### ORDERS OF THE CITY COUNCIL

In accordance with the orders of the City Council, duly approved, the work described below has been done:

Chicopee Road between St. James avenue and Carew street, has been graded and graveled in part.

Dickinson street southeasterly from Sumner avenue, has been widened from fifty feet to sixty feet, and granite curbing and tar concrete sidewalks have also been laid.

Melrose street easterly from Walnut street and thence southerly, has been graded and graveled.

The construction of Pecousic avenue, between Gardner and York streets, which was laid out and established by order of the City Council, approved August 4, 1908, has with one exception, been completed. The house at the southeast corner of Gardner street and Pecousic avenue has not been moved, as was agreed to be done at the time the street was laid out, although the owner has been requested to do so. This has prevented the building of the sidewalk on the east side of Pecousic avenue, abutting upon that property. There remains one building, on the westerly side of the street and south of Mill River, which stands within the lines of the street and which should be moved.

#### MACADAM

Expenditures for macadam street construction have slightly exceeded those for similar work last year. This work aggregates about 2 6-10 miles and includes the macadamizing of Pecousic avenue from Gardner street southerly, for a distance of 1925 feet to a width of twenty-seven feet. The total width of the roadway as laid out is seventy feet but it was considered that the width of macadam as laid will be sufficient for the present requirements of traffic.

#### TAR MACADAM

Experiments have been made in the reconstruction of

Pecousic avenue north of the South End Bridge with mixtures of tar and asphalt with trap rock.

The tar was furnished by the American Tar Company of Malden and the asphalt was prepared by The Texas Company of New York. Different grades of both materials were tried in varying proportions and the materials were laid in two or three different ways in order to demonstrate the best combination.

Practically all of the work is satisfactory and I believe that the City will be justified in laying more of this type of road during the coming year in streets subjected to heavy automobile traffic as well as to other light traffic. This subject has in recent years received the attention of the more progressive cities as well as many of the states, as it has practically been demonstrated that the old style macadam road does not under certain conditions withstand the vehicular traffic of today.

#### PAVING

A total of \$32,566.26 has been expended for so-called permanent paving, practically all of which has been expended for wood block paving. This material has been laid in State street west of Main street; in Worthington street east of Water street; in Chestnut street between Linden and Everett streets; in State street between Oak and Stebbins streets to a width of thirty-six feet; and in North Main street between Morgan and Bancroft streets. The aggregate area of all paving is 13,932 square yards, an amount I believe too small to properly provide for the present traffic conditions.

#### BRIDGES

The total expenditures for bridges have been \$6,845.85 of which \$4,257.91 was expended for cleaning and painting the North End Bridge, and \$481.52 for similar work on the South End Bridge. These amounts do not represent the final cost of the work, some of which will be done and paid for during the fiscal year 1910.

The bridges have been cleaned by sand blasting, by the United Construction Company of Albany, N. Y. While neces-

sarily this kind of work is expensive, it is the most thorough known method and is considered worth the price.

The painting was done by contract, by Robert Loudon, the paint materials being furnished by the City. Various kinds of graphite and lead paints have been used, and it is expected that the results will be satisfactory.

#### STREET WATERING

Orders of the City Council require the watering of 89.85 miles of streets and as heretofore, this work has been done with carts owned by the City and operated by contracts with team owners. The American Car Sprinkler Company of Worcester, has also furnished three cars for sprinkling certain streets containing car tracks.

These cars are furnished by contract and are operated under the direction of this Department.

In addition to the usual methods previously employed for dust-laying by means of water alone, this Department has experimented with four other materials; namely, calcium chloride, Headley's dust preventive, oil emulsion and road binder. There are a number of other materials on the market which presumably have considerable merit, but it was decided to make thorough experiment with the four varieties enumerated to derive information to guide us in succeeding years. Careful observations of about twelve miles of streets which were treated have been made, and the undersigned is of the opinion that although the cost of dust-laying by these means is somewhat higher than with water alone, the use of some of these materials to a considerable extent during the coming year is justified.

#### ASHES AND GARBAGE COLLECTION

These two branches of municipal service were given to the care of this Department as has been before stated. The rules in force at the time of transfer provided that ashes and rubbish should be hauled to dumps, and garbage sold to farmers and fed to swine, which rules have since been followed.

It is a fact that we are rapidly filling up our low lands, lying near the thickly settled portion of the city, and if the present method of disposal of ashes and rubbish is followed, the cost of



hauling to more distant points will be greatly increased. While this method has been cheaper than others it nevertheless, in my opinion, is not the best.

There are two other ways of disposing of these materials, now followed elsewhere; namely, by combustion of all that will burn and hauling the rest to dumps, and by sorting and selling the materials having value. The former method is the more popular one in England, where density of population has required the disposal of this material in the most sanitary manner. In our own country the latter method, or that of sorting, is practiced in some of our larger cities.

While certain revenue is derived from the sale of waste material, in my opinion the first method described, or that of combustion, is to be preferred to any other, eliminating as it does the close contact with the materials by those who sort it. While it is stated that sickness is not prevalent among those engaged in this work, at best the material is filthy and I believe it should be handled as little as possible.

In connection with the combustion it is possible to make use of the steam which is generated. Some cities use the power for pumping sewage; others generate electrical energy, etc. While at present it is not necessary to pump any sewage here, nor under present arrangements could the city use the electrical energy which might be developed. I believe that other disposal of such power could be made if the subject was carefully investigated.

Our method of disposal of garbage is followed quite extensively elsewhere and has been indorsed by various boards of health. If care is taken that the garbage is fresh at the time it is fed, no deleterious results accompany the feeding of it. Presumably, proper care is taken here and no serious trouble due to the practice may be anticipated.

While not specifically recommended, it is a fact that garbage can be satisfactorily consumed along with ashes and rubbish, as is done in some places. In other places, garbage is treated in reduction works and the oils and greases having value are extracted and sold. Usually, however, this treatment is done at

distant points, as the odor in the vicinity of the works is very obnoxious.

I believe improved methods of disposal of ashes and rubbish, if not that of garbage, will have to receive serious attention in the near future, for economic and sanitary reasons.

#### STREET RAILWAY WORK

The Springfield Street Railway Company has laid improved grooved rails weighing 125 pounds to the yard in place of tee rails, by request of the Board of Supervisors, in State street between Oak and Stebbins streets, and in North Main street between Morgan and Bancroft streets where wood block paving has been laid by the City.

At the request of the Street Railway Company and by authority of the City Council, similar rails have been laid in Main street in front of Court Square and also between William and Locust streets. The southerly track in State street between Maple street and the top of the hill, has been relaid with improved grooved rails. The easterly track in Fort Pleasant avenue has been relaid with heavier tee rails by authority of the Board of Supervisors.

An additional branch-off has been laid at the corner of Main and Elm streets and a double branch-off has also been laid at the junction of State and Hancock streets.

In all cases where changes in tracks have been made in paved streets, the Railway Company has provided a substantial concrete base, under the ties, to furnish proper foundation.

The relaying of paving disturbed by the Railway Company has been done by employees of this Department, at the expense of the Company.

#### CONCLUSION

Moneys available for expenditure for street construction, embracing grading, graveling, macadamizing and paving during the past ten years have been gradually reduced until this year our expenditures for this work have been about twenty-eight (28) per cent. less than was expended in the year 1900, while the

population of the City has increased during the same interval about thirty-five (35) per cent.

In the first place, appropriations during recent years for this work have not been as large as in the year 1900; and secondly, our street maintenance costs are considerably larger than during that year, so it can readily be seen why we are not able to do as much construction as formerly.

As a matter of fact, our streets in general are in good condition but the city is growing so rapidly that the need for replacing the macadam on certain streets, where such form of hardening has served satisfactorily in the past, with more enduring and better types of paving, is becoming very apparent.

Particular reference may properly be made to State street east of Stebbins street, and North Main street north of Bancroft street where the work done during the past year should be extended as soon as possible. Both of these streets have become busy thoroughfares and should be improved. Of course mention might be made of many other streets which could properly be paved to advantage, if moneys permitted.

It is to be hoped that appropriations for streets during the coming year may be larger than they have been in the immediate past, for only by the judicious expenditure of money may these necessary improvements be brought about.

The appropriations also for Watering Streets, Ashes Collection and possibly Garbage Collection will have to be increased for 1910, on account of increased mileage of streets to be watered and the improved methods of laying the dust; and on account of the large number of new buildings from which ashes and garbage are now collected.

#### ACKNOWLEDGEMENTS

It gives me pleasure to acknowledge the co-operation of Mr. A. H. Woodward, Assistant Superintendent of Streets, and to thank the foremen and men by whose efforts the success attained by the Department during the year, is largely measured

I thank Mayor William E. Sanderson, Alderman George D. Chamberlain and Councilman Harcourt W. Bull, members of

the Board of Supervisors of Highways and Bridges, for the many courtesies which they have extended to me.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

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BOARD OF ALDERMEN, December 27, 1909.

Read, accepted, ordered printed and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 27, 1909.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 29, 1909.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1909.

Approved.

W. E. SANDERSON, *Mayor.*

**MACADAM REPLACED BY PAVING**

STREET	Limits	Length in feet	Area in sq yds
Barnes street,	Bridge to Hillman	178	552
Lyman street,	Extension to Spring street,	228	949
No. Main street,	Morgan to Bancroft street,	879	4,544
State street,	Main street, westerly,	598	2,357
State street,	Oak to Stebbins street,	762	3,031
Worthington street,	Broadway to Water street,	299	1,061
		<b>2,944</b>	<b>12,494</b>

**PAVING REPLACED BY OTHER PAVING****GRANITE BLOCKS BY WOOD BLOCKS.**

STREET	Limits	Length in feet	Area in sq yds
Chestnut street	Essex to Everett	419	1,438

## TABLE OF MACADAMIZED STREETS

\*Includes Macadam laid by Spfd. Street Ry. Co.

\*\*Macadam laid by Spfd. Street Ry. Co.

†Macadam laid by private parties

NAME OF STREET	Limits	Length in feet	Area in sq yds
Abbe ave. bridge app..		872	2,325
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
†Agawam street,	Pecousic avenue to South st.,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Allen street,	Mill st., to N. E. R. R.	4,017	*13,798
Allendale street,		663	2,094
Amherst street,	Harvard to Monmouth street,	1,233	4,069
Andrew street,	State to Dawes street,	1,323	4,228
Arbor Street		437	1,222
Arch street,	Main street, westerly,	410	1,366
Armory street,	Federal to Warwick avenue,	2,305	7,688
Armory street	Liberty to Carew street,	1,570	5,203
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place.		644	2,538
†Avon place,		67	386
Bancroft street,		1,435	4,865
Banks place		225	536
Bay street,	St. James ave. to Cambridge street,	4,469	*14,853
Beaumont street,	Dickinson to Belmont ave.,	689	2,295
Beech street,		528	1,303
Beechwood street,	Sumner ave. to Spruceland,	501	1,670
Belmont avenue,	Woodside ave. to Oakland st.,	2,599	7,043
†Belmont avenue,	Oakland st. to Sumner ave., easterly side,		1,905
Belmont avenue,	Sumner avenue to White st.,		**3,700
Belmont avenue,	South side Garfield street to Sumner ave.,	1,624	4,170
Berkshire street,	State to Oak, I. O.,		**31,291
Birnie avenue,	Greenwich st. to Wason ave.,	3,369	8,077
Bliss street,	Main to N. Y. N. H. & H. R R.,	1,229	3,956
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Worthing- ton street,	1,152	3,837
Bowles street,	Bay to McKnight street,	750	2,500
Boylston street,		1,807	864
Bradford street,		862	2,935

TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limits	Length in feet	Area in sq yds
Bridge street,	Water street 280 feet, and Dwight to Chestnut,	568	2,296
Broad street,		989	3,177
Brookline avenue,		615	2,050
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,198
Carew street,	Main to point near Bartlett,	2,618	7,673
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,467
Catharine street,	Bay to Dartmouth,	150	483
Cedar street,		1,962	6,066
Central street,		4,903	12,883
Central street,	Cedar to Mill,		**2,705
†Chapin terrace,	Chestnut street to Marvin,	601	3,112
Charles street,	Liberty to Franklin,	618	1,888
Chase avenue,		583	1,943
Chestnut street,	State to Worthington, and east side, Jefferson ave. to Springfield street,	3,164	7,844
Chestnut street,	Allendale to Springfield,		**2,606
Church street,		832	2,553
Churchill street,		575	1,919
City Hall passageways,		557	1,020
Clark street,		619	1,100
Clarendon street,	Bay to 200 feet north of Wor- thington,	1,452	4,834
Clinton street,		703	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court Square ave.,	689	2,052
Cross street,	Willow to Maple,	608	1,416
Dale street,		812	2,051
Dartmouth street,		1,132	5,180
Demond avenue,		859	2,863
Dorchester street,		567	1,887
Douglas street,		540	1,806
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	856
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliot street,		1,007	3,243
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818	2,089
Elmwood street,		886	2,739
Emery street,		648	2,106
Essex street,		1,606	5,143
Euclid ave.,		1,169	3,896
Everett street,		1,500	4,859

TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limits	Length in feet	Area in sq yds
Farnsworth street,	Width of 20 feet,	513	1,710
Federal street,	Pearl to Worthington,	353	1,370
Ferry street,	Main to foot of hill,	1,357	3,441
Fisk avenue,		1,682	6,240
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington	1,407	4,666
Forest street,		784	2,502
Forest Park avenue.	Summer ave. to Forest street,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475
Fort Pleasant avenue,	West side,	2,794	10,138
Franklin street,	Main to Webster street,	3,613	12,386
Franklin street,	Webster to Genesee, width of 20 feet,	1,139	3,797
Frankmont street,		778	2,593
Fulton street,	Plainfield to Vine,	2,444	8,087
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
Genesee street,	Width of 20 feet,	276	821
George street,	Maple easterly,	110	647
Grace street,		354	885
Graft street,		577	1,603
Gray's avenue,		560	1,300
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hall street,		992	3,307
Hamburg street,	Width of 20 feet,	574	1,786
Hancock street,	Clark to State,	3,989	*12,479
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorn street,		540	1,374
Hebron street,		698	2,204
Heywood street	Liberty to Warwick ave.,	250	833
Hickory street,	Walnut to Sheffield st., and Alden street easterly,	4,710	11,589
High street,		2,563	5,544
Holyoke street,		776	2,001
Homer street,		582	1,940
Howard street,	N. Y., N. H. & H. R. R. to Main,	1,277	4,326
Hubbard avenue,		568	1,063
Huntington street,		643	2,143
Ingraham avenue,		258	462
Jackson street,	Sumner avenue to Maplewood wood terrace,	283	943
James street,		928	2,356
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Kenwood park,		721	3,888



TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limit	Length in feet	Area in sq. yds
Kibbe avenue, King street,		213	710
	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,568	*8,484
Lafayette street,		568	1,865
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,659
Leyfred terrace,		625	2,102
Liberty street,	Main street easterly, and Wolcott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chicopee line,		**9,920
Lillian street,		387	969
Linden street,		1,287	5,148
Locust street,		793	2,501
Lombard street,		590	1,677
Longhill street,	Sumner ave. to Warner place,	475	2,321
Longhill street,	Sumner ave. to Washington Boulevard,	1,741	6,837
Loring street,		707	2,294
Madison avenue,		529	1,657
Magazine street,		734	2,434
Magnolia terrace,	Lincoln to Armory, Sumner ave., to Spruceland ave.,	585	3,120
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.	Front street to Parker street,	5,563	19,691
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George street,	1,565	4,572
Mapledell street,		972	3,239
Maplewood terrace,	south side, Fort Pleasant ave. to Forest Park avenue,	1,301	3,075
Maplewood terrace	north side, Forest Park ave. to Riverview terrace,		1,874
Marble street,		1,074	3,508
Margaret street,	Water to Main	842	2,807
†Marvin street,	Pratt st. to Chapin terrace,	430	1,440
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
McKnight street,	Sherman to Bowles street,	532	1,773
Medford street,	N. Main st. to Birnie ave.,	624	2,080
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Monroe street,	Hancock to Eastern avenue	1,345	3,736
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mullberry street,	Maple to Ridgewood place,	991	3,256
Murray Hill avenue,		600	2,000
Myrtle street,		484	997

TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limits	Length in feet	Area in sq. yd.
1 street,	Carew to Waverly,	2,988	10,807
1 Main street,	Bancroft to Chicopee line,	5,406	27,940
ood street,		1,117	2,911
street,		1,344	4,136
street, I. O.,	Berkshire to Water street,	1,457	5,731
street, I. O.,	Berkshire to Main,		**2,078
ind street,	Allen to Sumner avenue,	4,153	14,808
street,		478	1,248
ns street,		1,509	4,293
nd street,		890	2,948
er avenue,		991	3,177
street,	Main to Willow, and foot of hill to Maple,	865	2,545
wood street,		450	1,500
n street,		1,631	5,438
street,	Chestnut to Byers,	1,220	3,513
isic avenue,	South street to South street,	2,205	7,350
isic avenue,	Main st. to Mill river bridge, width of 20 feet,	350	972
eton avenue,		2,582	6,545
street,		4,420	14,344
field street,	B & M.. R. R. Bridge to Wa- son avenue.,	5,395	14,716
field street,	Washburn to Wason avenue,		**3,953
ant street,		428	1,026
outh street,		479	1,597
and street,	N. Main to Birnie avenue	610	2,033
t street,	Chestnut to Marvin	600	2,000
eton street,	Bay to St. James avenue,	1,509	6,329
eton street,	Bay to St. James avenue,		**1,496
ect street,	Massasoit to Carew street,	817	2,996
hon street,		868	2,810
y street,	Oak to Eastern avenue,	2,704	7,780
olph street,	Sumner ave. to Forest Park avenue,	916	3,053
street,		660	2,493
old street,		730	2,432
and avenue,	Plainfield st. to Abbe ave. bridge approach,	690	1,674
nd avenue,		277	926
dge avenue,		516	1,599
1 street,	Mattoon to Spring,	522	1,426
rd street,	Market to Dwight,	367	1,278
ant street,		860	3,126
l street,		1,415	4,597
th street,		822	2,529
n street,		1,200	3,895
on street,	Birnie avenue to N. Main,	651	2,027
an street,	State to Clarendon street,	1,623	5,394
1 street,	Agawam street to Mill river,	1,863	6,878

TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limits	Length in feet	Area in sq. yds.
Spring street,	Chicopee line southwesterly, Chestnut street northeasterly, Chestnut to dingle, and Ham- burg street to Chicopee line,	2,373	7,283
Springfield street,		3,700	7,400
Springfield street,		400	1,345
Springfield street,			**1,243
Spruce street,	Water st. easterly, City Li- brary to Federal, Stebbins to Sherman, and Highland Div. N. Y., N. H. & H. R. R. to Berkshire street,	699	1,787
Spruceland avenue		1,370	4,545
State street,			
Stearns square,	east of park,	17,606	63,122
Stebbins street,	State to Quincy street,	250	451
St. James avenue,	State to Highland division N. Y., N. H. & H. R. R.,	973	3,243
St. James avenue,	State to end of track,	5,470	15,557
Stockbridge street,			**5,213
Summer street,	Federal to Armory,	635	1,617
Sumner avenue,	Longhill street to Forest Park entrance,	378	1,300
Sumner avenue,	Park entrance to Lenox street, southerly side,	3,215	15,327
Sumner avenue,	Lenox st. to east line Dick- inson street,	1,751	3,935
Sumner avenue,	Longhill street to White	484	4,254
Taylor street,			**11,631
Temple street,		413	1,310
Tenth street,		953	2,570
Terrence street,		1,577	4,451
Thomas street,		714	2,280
Thompson street,		583	1,045
Tyler street,		2,093	6,606
Union street,	Oak to Hancock, N. Y., N. H. & H. R. R. to ft. of hill, Maple to School, and Mulberry to Eastern ave.,	1,346	4,002
Vernon street,		6,502	21,040
Vine street,		823	1,952
Vinton street,		745	1,892
Walnut street,		612	2,445
Waltham avenue,	Mill to Hancock street,	1,457	**2,341
Warner place,		985	2,622
Warriner avenue,		691	2,153
Warwick street,		450	1,601
Wason avenue,	Heywood street easterly, B. & M. R. R. to North Main street,	811	2,703
Water street,	B. & M. R. R. to N. Main st.,	505	1,718
		5,145	**449
			16,525

TABLE OF MACADAMIZED STREETS—CONTINUED

NAME OF STREET	Limits	Length in feet	Area in sq yds
Water street,	Mill River bridge to Gardner st., 27' wide,	1,925	5,775
Waverly street,		850	2,910
Webster street,		606	2,020
West street,		1,195	3,872
Westminster street,		1,911	6,388
White street,	Allen to southerly line school- house property,	3,362	8,711
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham road,	State to Homer street,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton street,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water street,	1,307	4,000
William street,	N. Y., N. H. & H. R. R. to Main,	1,368	4,359
Willow street,	Union to State,	895	2,493
Winthrop street,		659	2,397
Woodside terrace,	Belmont to Forest Park ave.,	463	1,543
Woodside terrace,	Belmont avenue, easterly,	474	1,580
Worcester street, I. O.,	Pine to Fiberloid Co.'s drive- way, 18 ft. in width,	4,994	10,988
Worthington street,	Spring street, easterly,	1,259	4,197
Worthington street,	Sackett's pl. to Federal street	1,121	2,861
Worthington street,	Armory st. to St. James ave.,	2,514	7,961
Yale street,	Dartmouth to Monmouth,	1,493	5,142
York street,		1,000	2,997
Total,	65.89 miles.	347,896	1,205,564

TABLE OF PAVED STREETS.

Name	Limits	Material	Length in feet	Area in sq yds	Year Laid
Barnes street,		Bitulithic,	178	552	1909
Belmont avenue,	Hall street westerly,	Catskill blocks,	1,362	1,211	1901
Belmont avenue,	Hall to Oakland,	Metropolitan blocks,	1,023	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	483	1906
Bridge street,	Main to Dwight,	Rock asphalt,	698	2,525	1900
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1905
Bridge street,	Water street to Old Toll Bridge,	Granite blocks,	249	713	1907
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.	Granite blocks,	256	1,471	1899
Chestnut street,	B. & A. R. R. to Linden st.,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Everett street,	Creo-resinate wood blks, 3" x 3 1/2" x 8" to 10"	419	1,438	1909
Chestnut street,	Everett to Carew street,	Granite blocks,	354	718	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson avenue,	Bitulithic,	825	2,896	1905
Court street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	317	1,149	1897
Court square avenue,		{ Syracuse brick, Rock asphalt,	—	174	1897
Cypress street,	Court to Elm street,	{ Rock asphalt, Syracuse brick,	193	128	1907
Cypress street,	Main street westerly,	{ Syracuse brick, Granite blocks,	459	503	1897
Cypress street,	Boylston to Fulton,	Granite blocks,	216	330	1897
Dwight street,	State to Lyman,	Granite blocks,	2,324	1,700	1904
East Court street,	Main to Market,	Syracuse brick,	117	848	1905
Elm street,	Main to Court Square avenue,	Rock asphalt, { Rock asphalt, Syracuse brick,	343	9,905	1896
			—	297	1900
			—	949	1897
			—	330	1897

TABLE OF PAVED STREETS

Name	Limits	Material	Length in feet	Area in sq. yds.	Year Laid
Fort street, Fulton street, Hampden street, Hampden street, Harrison avenue, Hillman street, King street,	Main to Water, Cypress to Vine, Main street westerly, completion, Main to Water, Main to Dwight, Main to Dwight, St. Ry. turnout.	Granite blocks Granite blocks, Bitulithic, Bitulithic, Trinidad asphalt, Bitulithic, Creso-resinate wood bl'ks, 3" x 3½" x 6" to 10"	670 1,125 212 394 586 648 317	1,770 3,006 821 1,539 2,247 2,025 1,023	1895 1906 1904 1905 1896 1906 1908
Liberty street, Liberty street, Lyman street, Lyman street, Lyman street, Main street, Main street, Main street,	Chestnut to Cass, Cass to Heywood avenue, Main to Chestnut, Chestnut street, easterly, extension easterly to Spring st., Locust to Marble, Marble to William, William to Bliss.	Syracuse brick, Syracuse brick, Granite blocks, Granite blocks, Granite blocks, Syracuse brick, Syracuse brick, Creso-resinate wood bl'ks, 3" x 3½" x 6" to 10"	1,399 1,147 1,205 503 228 840 1,762 1,180	4,571 3,971 4,599 2,685 949 4,381 8,307 6,460	1900 1901 1899 1908 1909 1897 1896 1906
Main street, Main street,	Bliss to State, State to Worthington,	Syracuse brick, Creso-resinate wood bl'ks, 3" x 3½" x 8"	241 1,899	1,365 10,798	1893 1904
Main street,	Worthington to Hampden, west side,	Creso-resinate wood bl'ks, 3" x 3½" x 8"	382	1,183	1904
Main street,	Worthington to Hampden, east side,	Creso-resinate wood bl'ks, 4" x 4" x 8"	—	962	1903
Main street,	Hampden to Lyman,	Creso-resinate wood bl'ks, 4" x 4" x 8"	153	775	1903
Main street,	Lyman to Liberty,	Creso-resinate grooved wood bl'ks, 4" x 4" x 8"	484	2,780	1908

TABLE OF PAVED STREETS.

Name	Limits	Material	Length in feet	Area in sq yds	Year Laid
Main street,	Liberty to Sharon, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8"	453	1,135	1903
Main street,	Liberty to Sharon, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	—	1,487	1907
Main street,	Sharon to near Franklin and Emery,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	509	3,103	1907
Main street,	near Franklin, east side,	Syracuse brick,	36	144	1907
Main street,	Franklin to Carew, east side,	Syracuse brick,	1302	4,605	1897
Main street,	Emery to Sargeant, west side,	Catskill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catskill and Metropoli- tan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison avenue,	Bitulithic,	968	1,887	1906
North Main Street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
North Main street,	Morgan to Bancroft street,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	879	4,544	1909
North Main street,	at Wason avenue.,	Syracuse brick,	—	196	1908
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Railroad street,	Main to Water,	Granite blocks,	516	1,539	1906
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main street, westerly,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	598	2,357	1909
State street,	Main to Dwight,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	478	2,403	1908
State street,	Dwight to City Library,	Granite blocks,	541	1,631	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897

TABLE OF PAVED STREETS

Name.	Limits	Material	Length in feet	Area in sq. yds	Year Laid
State street,	Oak to Stebbins street,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	762	3,031	1909
State street,	at Walnut,	Syracuse brick,	—	278	1908
State street,	at St. James avenue,	Syracuse brick,	—	183	1907
State street,	Sherman to Highland Div.,				
Summer street,	N. Y., N. H. & H R. R.,	Bitulithic,	820	4,352	1905
Summer street,	Spring to near Autumn,	Granite blocks,	567	1,512	1907
Summer street,	Autumn to Kibbe ave.,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,				
Taylor street,	Main to Dwight,	Granite blocks,	787	2,635	1901
Townley avenue,		Bitulithic,	770	2,580	1904
Walnut street,		Bitulithic,	142	214	1908
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave. to Lebanon st.,	Bitulithic,	1,195	3,888	1905
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,334	1908
White street,	Allen to Orange,	Syracuse brick,	1,810	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,080	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Broadway,	Bitulithic,	404	1,418	1905
Worthington street,	Broadway to Water street.	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	299	1,061	1909
Worthington street,	at Sackett place,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10"	265	886	1908
Worthington street,	Federal to Armory,	Creo-resinate wood bl'ks, 3' x 3 ½" x 6" to 10"	374	1,312	1908
Total,			57,515	217,405	



## RECAPITULATION

Material	Length in feet	Length in miles	Area in sq. yds.	Material	Length in feet	Length in miles	Area in sq. yds.
Bitulithic,	10,940	2.072	39,934	Metropolitan blocks,	1,023	.194	996
Catskill blocks,	2,809	.532	6,741	Rock asphalt,	1,769	.323	5,699
Creo-resinate wood bl'ks,	9,421	1.784	46,738	Syracuse brick,	19,834	3.7	77,929
Granite blocks,	11,297	2.139	36,716	Trinidad asphalt,	696	.111	2,247
Johnsonburg blocks,	145	.027	483				
Total,					57,515	10.003	217,405

# **FORTY-FIRST ANNUAL REPORT** **OF THE** **SEWER DEPARTMENT**

SPRINGFIELD, MASS., December 23, 1909.

*To the Mayor and Board of Aldermen :—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 1, 1909.

## RECEIPTS

### SEWERS AND DRAINS

Appropriation.....	\$25,000 00	
Sewer entrances { fees.....	16,249 87	
{ building private drains.....	6,612 75	
Departments and private parties, bills rendered..	1,682 92	
		\$49,545 54
Special account for building Ferry, Union and		
State streets sewers.....		9,398 83
		<b>\$58,944 37</b>

## EXPENDITURES

Building private drains.....	\$5,266 27
City teams, uncredited balance.....	301 19
City yard.....	1,150 39
Engineering.....	552 84
Office and general expenses.....	1,334 79
Salary of first assistant superintendent.....	1,500 00
Sewers, { cleaning.....	2,438 48
{ construction.....	38,158 99
{ flushing.....	1,819 25
{ repairs.....	1,356 23
Supplies.....	269 16
Amount carried forward,	<b>\$54,147.59</b>

*Report on Sewers*

Amount brought forward,	\$54,147 50	
Tools.....	709 18	
Foremen's winter and holiday pay.....	123 75	
Work and material charged to departments and private parties.....	1,612 80	
Refunds on account of fees for sewer entrances....	306 85	
Refunds—unexpended balances on deposits for building private drains.....	465 45	
Refund from Ferry, Union and State streets sewers account.....	92 95	
	<hr/>	
	\$57,458 57	
Credit by material used 1909 and paid for 1910...	193 70	
	<hr/>	
	57,264 87	
Unexpended balance.....	1,679 50	
	<hr/>	
		\$58,944 37

## SPECIAL

## FERRY, UNION AND STATE STREETS SEWERS

Limit of expenditure.....		\$52,505 00
Expended prior to December 1, 1908.....	\$39,349 93	
Expended since December 1, 1908.....	* 9,607 65	
	<hr/>	
		48,957 58
		<hr/>
Unexpended balance.....		\$3,547 42

\*Of this account \$7,668.71 is included in the item of construction in table of expenditures above.

The sum of \$1,637.37 also included in this amount covers cost of work done during the year 1908.

## BILLS RECEIVABLE

Bills receivable, November 30, 1908.....	\$710 14	
Bills committed, fiscal year 1909.....	37,717 98	
	<hr/>	
		\$38,428 12
Bills paid, fiscal year 1909.....	\$33,944 37	
Abatements.....	3,921 61	
	<hr/>	
		37,865 98
		<hr/>
Bills receivable, November 30, 1909.....		\$562 14

## SEWER CONSTRUCTION CLASSIFIED

### VITRIFIED CLAY PIPE

SIZES	LENGTH IN FEET		Total Length
	New Construction	Reconstruction	
8"	2,426'	106'	2,532'
10"	7,561'	491'	8,052'
12"	4,205'	1,150'	5,355'
15"	1,975'	216'	2,191'
18"	2,127'		2,127'
20"	96'		96'
24"	728'		728'
Total,	19,118'	1,963'	21,081'

### CONCRETE

SIZES	LENGTH IN FEET		Total Length
	New Construction	Reconstruction	
2'-10"x4'-5" elliptical.....		612'	612'
4'-0" circular.....	684'		684'
2'-4"x3'-6" elliptical.....		1,504'	1,504'
2'-2" circular.....	833'		833'
Total,	1,517'	2,116'	3,633'

**SEWER CONSTRUCTION AND RECONSTRUCTION  
DESCRIPTIONS AND COSTS—FISCAL YEAR 1909**

LOCATION	Material	Length in Feet	Size	Cost
(1) Acorn street, Sycamore to Edgewood street	Clay	276	10"	\$176.64
Andrew street, manhole,				55.54
Beacon street, Colton street east- erly, relaying.....	Clay	106	8"	75.08
Benton avenue, Benton street east- erly.....	Clay	300 325	10" 8" }	345.31
Bond street, manholes.....				65.58
Bristol street, Wilbraham road southerly.....	Clay	299 69	15" 12" }	297.39
Bryant street, extension northerly to Sumner avenue, comple- tion.....	Clay	125	10"	151.98
Burr street, manhole.....				30.20
Butler street, manholes.....				97.58
Carew street, manholes.....				111.72
Center street, Oak Grove avenue northerly.....	Clay	70	10"	24.73
Charles street, manholes.....				70.76
Church street, manhole.....				41.97
Clayton street, Plainfield street, westerly.....	Clay	299	18"	583.76
Clifton avenue, manhole.....				30.94
Cliftwood street, manhole.....				37.90
(3) Clinton street, Boylston to Fulton street.....	Clay	150	10"	-----
(1) College avenue, extension northerly to Acorn street....	Clay	136 900	12" 10" }	419.68

**SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED**

LOCATION	Material	Length in Feet	Size	Cost
Colton street, manhole.....				\$30.52
Commonwealth avenue, extension southerly to Fairview street, completion.....	Clay	146	15"	190.04
Converse street, Sumner avenue to Vermont street.....	Clay	506	18"	443.87
Cornell street, manholes.....				62.80
Cumberland street, extension east- erly.....	Clay	58	15"	118.19
Cypress avenue, extension north- erly.....	Clay	40	12"	23.78
Cypress street, Fulton street to Main street, completion.....				326.50
Dale street, manhole.....				26.97
Dorchester street, manhole.....				37.38
Eastern avenue, extension north- erly to King street.....	Clay	55	12"	95.43
Eastern avenue, manhole.....				32.72
Edgemont street, State street northerly.....	Clay	499 201	10" 8" }	510.70
(1) Edgewood street, Acorn to Bay street.....	Clay	1,001	8"	443.73
Elmwood street, extension west- erly, completion.....				46.94
Fairmount street, Commonwealth avenue to Lawndale street...	Clay	350	10"	173.17
Firglade avenue, Washington boulevard to Pineywoods ave- nue.....	Clay	242 176	12" 10" }	395.64
Franklin street, manhole.....				30.36

## SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED

LOCATION	Material	Length in Feet	Size	Cost
Fremont street, manhole.....				\$36.33
Gardner street, Water to Main street, relaying.....	Clay	226 199	12" } 10" }	423.58
Girard avenue, manhole.....				30.96
Governor street, Armory street to Penacook avenue, incomplete,	Clay	96	20"	118.51
Grant street, manhole.....				37.88
Grosvenor street, manhole.....				34.62
Groveland avenue, Dickinson street to town line.....	Clay	533 117	12" } 10" }	506.13
Hampden street, I. O., Pine street westerly.....	Clay	200 199	12" } 10" }	311.59
Hancock street, manhole.....				40.76
Hawthorn street, manhole.....				35.08
Hebron street, manhole.....				27.26
Holyoke street, manhole.....				59.18
Home street, Liberty street west- erly.....	Clay	424	10"	302.25
Howard st. Water st. westerly.	Clay	30	12" }	43.43
Howard st. Water st. easterly.	Clay	31	12" }	43.44
Relaying.				
Howard street, manhole.....				37.88
Hyde avenue, Fisk avenue to Plainfield street.....	Clay	301 300 219	15" } 12" } 10" }	712.99
Irvington street, extension south- erly to Morningside park....	Clay	300	10"	180.95
Lafayette street, manhole.....				30.48

SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED

LOCATION	Material	Length in Feet	Size	Cost
Lebanon street, manholes.....				\$141.42
Lenox street, manhole.....				20.67
Lester street, Sumner avenue to Vermont street.....	Clay	286 279	12" } 10" }	324.11
Lexington avenue, manhole.....				30.21
Liberty street, manholes.....				65.44
Linden street, manholes.....				63.60
Logan street, Collins to Ladd street.....	Clay	183	10"	119.83
Lombard street, manhole.....				31.91
Loring street, Water street east- erly, relaying.....	Clay	40	12"	48.34
Loring street, manhole.....				32.16
Lyman street, Chestnut street easterly, relaying.....	Clay	216	15"	683.83
Magazine street, manholes.....				107.86
Main street, I. O., extension north- erly to Chicopee River, across private land.....	Clay	414	18"	474.42
Margaret street, Water street easterly, relaying.....	Clay	30	12"	31.41
Margaret street, manhole.....				33.59
Marion street, manhole.....				52.93
Massasoit street, bulkhead.....				20.20
Mattoon street, manholes.....				89.71
Mechanic street, manhole.....				32.69
Montmorenci street, Chestnut to Massasoit street, rebuilding..	Con- crete	612	2'-10"x4'-5" elliptical	2,725.07



## SEWER CONSTRUCTION AND RECONSTRUCTION—Continued

LOCATION	Material	Length in Feet	Size	Cost
Myrtle street, I. O., extension southerly to Essex street.....	Clay	149	10"	\$209.45
North street, Harriet street north- erly.....	Clay	150	10"	188.48
North street, extension northerly to Jefferson avenue.....	Clay	64	12"	102.61
North street, flush gate.....				20.09
Northampton avenue, Gunn square, northerly.....	Clay	126	10"	103.71
Norwood street, manholes.....				87.09
(2) Oak street, I. O., Chicopee River to Main street.....	Con- crete	684	4'-0" Circular	4,276.11
Oakland street, Belmont avenue southerly.....	Clay	311	10"	330.77
Orange street, manhole.....				34.76
(4) Orchard street extension westerly.....	Clay	354	10"	-----
Osgood street, manhole.....				37.09
Parkside avenue, Carew street to Van Horn avenue.....	Clay	350 350 351 300	18" 15" 12" 10"	1,180.15
Pine street, manholes.....				116.11
Pineywoods avenue, flushgate....				25.62
Plainfield street, extension south- erly to West street.....	Clay	32 203	12" 10"	297.72
Ringgold street, manhole.....				35.30
(3) Sheldon street, Birnie avenue to North Main street, relay- ing.....	Clay	311 317	12" 10"	-----

## SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED

LOCATION	Material	Length in Feet	Size	Cost
Sheldon street, flushgate.....				\$18.49
Smith street, Knox to Dorne street relaying.....	Clay	165	12"	148.02
State street, easterly from High School, completion.....				5.40
State street, extension easterly to Alden Warner's, completion				366.32
State street, Walnut to Oak street	Clay	250 253 348	18" 15" 12"	1,678.37
State street, manholes.....				
State street, manholes.....				
Stirling street, Eastern avenue to Sheffield street.....	Clay	640	12"	447.45
(1) Sycamore street, Acorn to Bay street.....	Clay	899	8"	352.24
Temple street, extension easterly to School street.....	Clay	110 300 345	15" 12" 10"	890.87
Trenton street, Dickinson street to Commonwealth avenue...	Clay	146	10"	
Union street, Ingraham avenue to Oak street, rebuilding, com- pletion.....	Con- crete	1,504	2'-4"x3'-6" Elliptical	
Union street, manhole.....				31.37
Vermont street, Converse to Po- mona street.....	Clay	258 267 225	15" 12" 10"	489.33
Vernon street, manhole.....				
Vine street, manholes.....				
Walden street, Commonwealth to Belmont avenue.....		296	10"	148.67

## SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED

LOCATION	Material	Length in Feet	Size	Cost
Walter street, Birnie avenue to North Main street, relaying..		385	12"	422.74
Washington boulevard, extension easterly and northerly to Pineywoods avenue.....	Clay	308 200 242 330	18" 15" 12" 10"	868.79 120.48
Water street, manholes.....				
White street, Sumner avenue to Lawrence street, incomplete..	Clay	728	24"	1,061.81
William street, Water street east- erly, relaying.....	Clay	32	12"	53.78
William street, manholes.....				71.50
(2) Worthington street, at Kibbe Hollow.....	Con- crete	833	2'-2" Circular	2,357.86
X Court, Dickinson street westerly	Clay	34	10"	84.24
		24,714		\$38,460.76

1. Sanitary sewer.
2. Storm water only.
3. Cost paid by Water Department.
4. Cost paid by Little River Water Supply.

NOTE.—The costs of the above described sewers include the costs of manholes and flushgates.

PIPE SEWERS BUILT BY PRIVATE PARTIES

LOCATION	Material	Length in Feet	Size
Rimmon avenue, Weaver Ramble northerly.....	Clay	200	12"
X Court, Dickinson street west- erly and southerly.....	Clay	192	10"
		392'	

SEWERS ABANDONED 1909

LOCATION	Material	Length in Feet	Size	Cost
Beacon street, Colton street east- erly.....	Clay	124	8"	\$3.65
Gardner street, Water street to Main street.....	Cem.	400	12"	518.97
Howard street, Water street east- erly.....	Cem.	36	12"	33.36
Howard street, Water street west- erly.....	Cem.	36	12"	37.49
Loring street, Water street east- erly.....	Cem.	43	12"	49.68
Lyman street, Chestnut street easterly.....	Cem.	216	15"	495.43
Margaret street, Water street easterly.....	Cem.	33	12"	34.21
Montmorenci s t r e e t, Chestnut street to Massasoit street....	Clay	612	12"	715.50
Sheldon street, Birnie avenue to North Main street.....	Cem. Clay	590 42	15" 10" }	43.87
Smith street, Knox street to Dorne street.....	Clay	166	10"	27.26
Union street, Ingraham avenue to Oak street.....	Brick	1,487	2'-0"x3'-0"	5,944.29

## SEWERS ABANDONED— CONTINUED

LOCATION	Material	Length in Feet	Size	Cost
Walter street, Birnie avenue to North Main street.....	Cem.	285	12"	\$70.58
William street, Water street east- erly.....	Cem.	33	12"	34.63
		4,103		\$8,008.92

## SUMMARY

DESCRIPTION	Length in Feet	Cost
Concrete sewers built by regular appropriation..	2,129	\$9,359.04
Concrete sewers built by special appropriation..	1,504	7,638.58
Clay pipe sewers built by regular appropriation..	19,949	18,619.21
Flush gates and manholes built by regular ap- propriation.....		2,843.93
	23,582	\$38,460.76
Clay pipe sewers built at expense of other De- partments.....	1,132	
	24,714	\$38,460.76
Clay pipe sewers built by private parties.....	392	
	25,106	\$38,460.76
Sewers abandoned.....	4,103	8,008.92
Net addition to sewer system.....	21,003	\$30,451.84

# SEWER CLEANING AND REPAIRS

	COST OF	
	Cleaning	Repairs
Bay street.....	\$109.82	
Belmont avenue.....	13.62	
Benton street.....	15.75	
Birnie avenue.....	1.75	\$9.01
Bond street.....		12.03
Bowdoin street.....	31.50	
Carew street.....	63.25	29.21
Cedar street, I. O.....		37.44
Clifton avenue.....		10.40
Clinton street, submerged outlet.....	16.42	
Dickinson street.....	22.01	46.98
Elm street, submerged outlet.....	16.41	
Elmwood street.....	15.75	2.45
Essex street.....		4.00
Ferry street.....	77.54	1.74
Florence street.....	39.37	4.85
Florida street.....	17.59	
Forest street.....		13.13
Forest Park avenue.....	13.78	
Fort Pleasant avenue.....	3.22	55.98
Franklin street.....	20.41	2.15
Garden Brook.....	354.36	
Granville street.....	28.72	
Jefferson avenue.....		309.65
King street.....	33.97	
Liberty street.....	32.58	48.23
Loughill street.....	3.93	8.03
Lowell street.....	175.58	
Main street.....	285.09	
Main street, I. O.....	28.56	20.38
Manhattan street.....	23.40	
Maplewood terrace.....	35.30	
Marion street.....	15.75	
Massasoit place.....	15.75	
Massasoit street.....	110.20	
Monroe street.....	31.50	.75
Montrose street.....	20.53	
New street.....		11.48
Norwood street.....	15.75	
Oak street, I. O.....	79.63	
Orange street.....	14.10	
Orchard street.....	37.01	
Orleans street.....	17.73	
Parker street, I. O.....		12.07
Parkwood street.....	18.15	
Pine street.....	13.09	36.83

## SEWER CLEANING AND REPAIRS—CONTINUED

	COST OF	
	Cleaning	Repair
Plainfield street.....	\$11.38	\$2.95
Princeton street.....	13.66	.88
Rowland avenue.....	40.04	
Sanford street.....	45.00	6.33
School street.....	47.24	
State street.....	74.15	3.38
Sundry sewers, costing less than \$10.....	54.04	251.88
Union street.....	72.39	60.83
Vernon street.....	51.74	
Walnut street.....	12.62	7.41
Walter street.....	23.62	3.25
Washburn street.....	3.66	8.17
Wason avenue.....	11.38	
Westminster street.....	7.87	3.38
Wilbraham road.....	39.38	
William street.....	31.50	
Worthington street, submerged outlet.....	17.92	
Worthington street.....	12.02	331.00
	<b>\$2,438.48</b>	<b>\$1,356.23</b>

## GENERAL DESCRIPTIONS

The total expenditures for all sewer construction have been \$38,460.76.

## TRUNK SEWERS

The sum of \$9,607.65 was expended on the construction of the Ferry, Union and State street trunk sewers, completing work begun last year.

In addition to the above trunk sewers a cement concrete storm water overflow sewer has been built in Indian Orchard, from the Chicopee River across lands of the Boston and Albany Railroad Company, and through Oak street to Main street. This is intended to provide relief from flooding of cellars in the vicinity of Oak and Main streets, which not only frequently caused consid-

erable annoyance to the occupants of the property, but necessitated the settlement of a damage suit.

Provision for the flow of storm water tributary to the Worthington street sewer, which latter sewer has been overcharged at times of severe storm, has been made by the construction of an auxiliary sewer westerly from Bowdoin street and lying parallel to and northerly of the Worthington street sewer.

The total length of trunk sewer construction, all of which has consisted of concrete masonry, is 3633 feet. As during the past few years, all of this work has been performed directly by this Department.

### SANITARY SEWERS!

Sanitary sewers have been built in the tract of land recently developed, lying east of Oak Grove avenue and southerly of Bay street. This is a temporary expedient, as it is customary to provide for the flow of surface water in addition to house drainage. While impossible now, provision will have to be made at a later time to provide for the flow of surface water.

### PIPE SEWERS!

The total length of pipe sewer construction, varying in size from eight inches to twenty-four inches in diameter, aggregates 21,081 feet, all of which is described elsewhere in detail.

The attention of this Department was called by the Board of Health to the odors arising from the swamp north of Main street, Indian Orchard, which land was owned by the Ludlow Manufacturing Associates. Petition was circulated and, upon authority of the City Council, a pipe sewer has been built connecting the outlet of the sewer discharging into the swamp with the Chicopee River, thus abating the nuisance.

### ORDERS FOR SEWER CONSTRUCTION!

The estimated cost of completing the construction of sewers



ordered by the Board of Aldermen and the City Council and subject to the orders of the Committee on Sewers and Drains, is about \$40,600.

#### ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of Mr. Howard O. Buck, Assistant Superintendent of Sewers, and to thank the foremen and men by whose efforts the success attained by the department during the year is largely measured.

I thank Aldermen Nelson L. Elmer, Henry N. Bowman and William A. Dodge, members of the Committee on Sewers and Drains, for the many courtesies which they have extended to me.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

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BOARD OF ALDERMEN, December 27, 1909.

Read, accepted, ordered printed and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 27, 1909.

Read and concurred.

H. S. GILBERT, *Clerk.*

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Presented to the Mayor for approval, December 29, 1909.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1909.

Approved.

W. E. SANDERSON, *Mayor.*

# CITY OF SPRINGFIELD

SEWER SYSTEM TABULATED TO DECEMBER 1, 1909

NAME OF SEWER	Length in Feet	Size	Material	Cost
Abbe ave., Flak ave., westerly...	301	18"	Clay	\$497.88
	275	12"	Clay	
Plainfield st., westerly.....	300	18"	Clay	1,405.16
	300	18"	Clay	
	301	12"	Clay	
	200	10"	Clay	
**Acorn st., Sycamore to Edge- wood st.....	276	10"	Clay	\$1,902.54
Acornst ave., Main street, easterly.....	294	20"	Clay	298.94
	279	18"	Clay	
	271	15"	Clay	
	26	12"	Clay	
Adams st., Main st. to Town brook.....	64	18"	Cem.	322.22
	86	18"	Clay	
Town brook, easterly.....	890	....	Brick	66.68
Richelleu st., westerly.....	237	12"	Clay	304.12
Alden st., Hancock to Eastern ave.....	595	18"	Cem.	1,646.13
	820	18"	Cem.	
Eastern ave. to Wilbraham ave.....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	Clay	250.86
				[ 2,808.38
Alderman st., Dickinson st. to Scott st.....	296	18"	Clay	1,148.99
	304	15"	Clay	
	300	12"	Clay	
	443	10"	Clay	
Alexander street, North street, easterly.....	288	10"	Clay	188.48
Alfred st., Birnie ave., easterly..	377	10"	Clay	.....
Allen ave., Allen st., easterly....	338	10"	Clay	332.72
Allen st., Mill river to Oakland street.....	216	24"	Clay	576.86
Mill st. to Oakland st.....	365	10"	Clay	447.19
Oakland st. to Plumtree rd...	686	24"	Clay	1,832.06
	383	18"	Clay	1,598.59
	474	15"	Clay	
	580	12"	Clay	
	1,603	12"	Clay	
	1,401	10"	Clay	984.62
				6,320.90
Albendale st., North st., easterly	272	12"	Clay	401.48
	340	10"	Clay	
Amaren street, State st., south- erly.....	349	10"	Clay	222.90

\*\*Sanitary sewer.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Amherst st., Harvard street, .. northerly.....	441	12"	Cem.	\$146.99
	25	10"	Clay	23.78
Princeton to Monmouth st...	512	12"	Clay	622.90
	191	10"	Clay	
				\$793.67
Andrew st., State st., northerly	463	20"	Clay	1,899.21
	422	18"	Clay	
	382	12"	Clay	
Arbor st., Butler to Carew st...	398	12"	Clay	318.05
Arch st. (see Garden brook)....				
Armory Hill Sewer (see private ways).				
Armory st., Worthington street, southerly.....	570	15"	Cem.	658.06
Summer st., southerly.....	374	12"	Clay	384.78
	325	10"	Clay	193.87
B. & A. R. R. to Liberty street	690	15"	Clay	1,165.47
	360	12"	Clay	
	271	10"	Clay	
Liberty to Sullivan st.....	450	1'-10"x2'-9"	Brick	2,439.42
	476	1'-8"x2'-6"	Brick	
Sullivan to Carew st.....	156	24"	Clay	1,006.45
	267	20"	Clay	
	290	12"	Clay	
Carew st., northerly.....	452	20"	Clay	1,209.52
	803	10"	Clay	
	31	20"	Clay	
Springfield st., southerly.....	146	18"	Clay	317.00
				7,374.57
Ashley st., Cedar st., easterly ..	65	18"	Cem.	80.45
	580	15"	Cem.	1,555.00
	697	12"	Cem.	
				1,635.45
Atwater Terrace road, Greene lane, westerly.....	322	20"	Clay	655.06
	199	18"	Clay	
	397	12"	Clay	
Auburn st., Fulton st., easterly.	335	10"	Clay	334.91
	363	10"	Clay	
Austin st., State st., northerly..				
Autumn st., Summer to Worth- ington st .....	239	15"	Clay	715.29
Avon place, Maple street, east- erly.....	695	24"	Clay	3,359.45
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4"x5'-0"	Brick	3,914.04
including Chestnut st., Ban- croft to Montmorenci st...	379	3'-2"x4'-9"	Brick	
Montmorenci st., Chestnut st., easterly.....	43	3'-2"x4'-9"	Brick	

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Bay st., St. James avenue to Pleasant st.....	250 245 228	15" 12" 10"	Clay Clay Clay	} \$715.01
Florida to Pleasant st.....	235	12"	Clay	
Florida to Sherman st.....	304	20"	Clay	
	377	18"	Clay	} 1,092.89
	812	15"	Clay	
Sherman to Clarendon st....	151	8"	Cem.	
Catherine to Clarendon st...	194	10"	Clay	200.66
Bowles to Cambridge st.....	1,037	2'- 8"x4'-0"	Brick	} 8,056.62
	360	2'- 2"x3'-3"	Brick	
Cambridge st., easterly.....	247	8"	Clay	
Beacon st., Eastern avenue to Colton st.....	250	10"	Clay	119.21
Colton st., easterly.....	106	8"	Clay	75.08
				194.29
Beaudry st., I. O., Main street, southerly.....	300 270	12" 10"	Clay Clay	} 745.95
Beaumont st., Belmont avenue, northerly.....	250 431	12" 10"	Clay Clay	
Belmont avenue to Sumner avenue.....	264	10"	Clay	183.91
				587.78
Beech street., Central st., north- erly.....	410	10"	Cem.	95.58
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut street, westerly.....	220 140	8" 6"	Clay Clay	} .....
Bellevue ave., Belmont ave., easterly.....	300 300 194	18" 15" 12"	Clay Clay Clay	
Dickinson st., westerly.....	744	10"	Clay	.....
Belmont ave., Fort Pleasant ave., easterly.....	90	10"	Clay	93.92
Mill river to Woodside terrace..	954	20"	Clay	2,698.67
Woodside ter. to Litchfield st..	660	2'- 0"x3'-0"	Brick	} 11,750.19
	445	1'-10"x2'-9"	Brick	
	595	1'- 8"x2'-6"	Brick	
	550	1'- 6"x2'-3"	Brick	
	432	20"	Clay	
Litchfield street to Kenwood Park.....	493	18"	Clay	} 1,451.53
Kenwood Park to Sumner ave..	301	15"	Clay	
	403	12"	Clay	
	616	10"	Clay	871.69

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
*Sumner avenue to Wood- lawn st.....	830	3'- 4"x3'-0"	Brick	} 68,216.97
	819	3'- 0"x4'-0"	Brick	
	245	3'- 0"x4'-0"	Brick	
	416	2'-10"x4'-3"	Con.	} 3,470.41
				<hr/> \$26,553.38
Belmont court, Belmont avenue, southerly.....	216	10"	Clay	146.76
Benton avenue, Benton street, easterly.....	300	10"	Clay	245.31
	325	8"	Clay	} 513.96
Benton st., State st., southerly.	301	12"	Clay	
	300	10"	Clay	
	247	8"	Clay	
	320	8"	Clay	419.68
Berendo ave., Grenada terrace to Alderman st.....	345	12"	Clay	<hr/> 933.64
Berkeley st., Princeton to Mon- mouth st.....	483	12"	Clay	323.67
Berkshire st., I. O.....				517.32
Oak to Myrtle st.....	701	12"	Cem.	946.21
Oak st., easterly.....	387	12"	Clay	389.59
Chestnut st., to Myrtle st....	577	12"	Clay	545.74
				<hr/> 1,881.84
Bease place, Main st., west- erly.....	290	10"	Clay	.....
Birnie avenue, Wason avenue, northerly.....	362	24"	Clay	579.11
Wason ave., southerly.....	350	18"	Clay	} 1,024.75
	417	15"	Clay	
Worcester street extension, northerly to Grace st.....	162	15"	Cem.	.....
Worcester street extension, southerly to Walter st.....	144	12"	Cem.	.....
Douglas st., northerly.....	292	24"	Clay	} 1,149.93
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker street.....	373	1'-10"x2'-9"	Brick	1,319.73
	312	20"	Clay	} 768.74
	316	18"	Clay	
	168	15"	Clay	
Arch to Hooker st.....	1,048	24"	Clay	158.56
Bliss st., from Main to N. Y., N. H. & H. R. R.....				.....
	1,284	12"	Cem.	<hr/> 5,000.33
Bloomfield st., Oakland street, easterly.....				1,190.68
	500	18"	Clay	} 1,237.06
	361	15"	Clay	

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
<b>Band place, including 41 feet in Bridge street (for cost see Symonds ave.).....</b>	203	12"	Cem.	.....
<b>Band st., Garden Brook sewer to Chestnut st.....</b>	341	2'- 0"x3'-0"	Brick	\$1,680.25
	959	24"	Clay	2,261.42
				<u>\$3,841.67</u>
<b>Bowdoin st., Worthington st., southerly.....</b>	660	15"	Cem.	762.11
	285	12"	Clay	371.52
<b>Worthington to Ingersoll gr..</b>	819	12"	Cem.	758.64
				<u>1,892.27</u>
<b>Bowles st., Bay to McKnight Pease st., northerly.....</b>	752	15"	Cem.	1,058.67
	275	8"	Clay	35.77
				<u>1,094.44</u>
<b>Baylston st., Cypress to Clinton street.....</b>	610	18"	Cem.	}
	346	15"	Cem.	
<b>Brace street, Belmont avenue, northerly.....</b>	137	10"	Clay	.....
<b>Bradford st., North Main to Fulton st.....</b>	352	15"	Cem.	}
	758	12"	Cem.	
<b>Bridge st., Main st. to Conn. river.....</b>	798	12"	Cem.	718.79
	275	15"	Clay	429.14
<b>Main to Chestnut st.....</b>	1,158	2'- 0"x3'-0"	Brick	5,414.20
				<u>6,562.13</u>
<b>Bristol street, Wliibraham road, southerly.....</b>	299	15"	Clay	}
	69	12"	Clay	
<b>Broad st., Hanover to Main st.</b>	970	15"	Cem.	1,401.19
<b>Brookline avenue, North street, easterly.....</b>	228	12"	Clay	}
	171	10"	Clay	
<b>Brown st., Yale to Bay st.....</b>	483	10"	Cem.	}
	21	8"	Cem.	
<b>Bryant street, Belmont avenue to Sumner avenue.....</b>	274	15"	Clay	}
	301	12"	Clay	
	300	10"	Clay	
<b>Buckingham place, Bay street, westerly.....</b>	235	10"	Clay	168.97
<b>Buckingham st., Bay to Clar- endon st.....</b>	651	12"	Clay	}
<b>Bay st., southerly.....</b>	35	12"	Cem.	
<b>State to Bay st.....</b>	305	18"	Clay	}
	345	15"	Clay	
	675	12"	Clay	
				<u>1,755.64</u>

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Burr st., Andrew st., easterly..	570	12"	Clay	\$459.03
Butler st., Chestnut to Cass st.	1,268	20"	Clay	\$2,119.54
Cass st., easterly.....	321	20"	Clay	520.71
				2,640.25
Calhoun st., North Main to North st.....	853	12"	Clay	631.40
North st., easterly.....	300	8"	Clay	227.19
				858.59
Cambridge street, Bay street, southerly.....	276	20"	Clay	1,100.88
	331	18"	Clay	
	266	15"	Clay	
	302	12"	Clay	
	278	10"	Clay	411.63
				1,512.51
Card-factory pond (see private ways).				
*Carew st., Main st. to Garden brook (cost shown under Clinton st.).....	250	4'- 6"x8'-9"	Brick	.....
	32	5'-0" cir.	Brick	.....
Garden brook to Prospect st.	1,456	4'-3" cir.	Brick	21,913.22
	1,257	3'-0" cir.	Brick	
	791	2'-8" cir.	Brick	
	580	18"	Cem.	
Massasoit street, easterly....	200	12"	Cem.	671.51
				153.28
Prospect st to Armory.....	989	2'-8" cir.	Con.	8,513.49
	1,365	2'- 6"x3'-9"	Con.	
Armory st., easterly.....	1,101	10"	Clay	2,400.86
	448	8"	Clay	
Liberty st., easterly.....	502	15"	Clay	
	499	12"	Clay	
	434	10"	Clay	
Carlisle st., Wilbraham road, southerly.....	400	10"	Clay	33,652.34
	246	8"	Clay	355.00
Cass st., Liberty to Franklin st.	500	12"	Clay	457.99
	163	10"	Clay	
Linden st., southerly.....	596	15"	Clay	
Linden st., northerly.....	224	12"	Clay	892.07
				1,350.06
Catharine st., Dartmouth to McKnight st.....	833	2'-0"x3'-0"	Brick	4,428.92
State st. to McKnight st....	348	15"	Clay	1,348.95
	438	12"	Clay	
	333	10"	Clay	
				5,777.87
Cedar st., Pine to Walnut st...	180	3'-10"x5'-9"	Brick	889.35
	1,074	3'- 8"x5'-6"	Brick	6,206.73

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Pine st., westerly.....	378	12"	Cem.	\$288.32
Cedar st., I. O., Main street to river.....	433	2'- 0"x3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	263.92
Cemetery brook (see private ways).				\$3,265.36
Center street, Oak Grove ave., northerly.....	70	10"	Clay	24.73
Center st., I. O., Oak to Pine st..	463	12"	Cem.	510.73
Pine to Cedar st.....	349	12"	Clay	668.19
	300	10"	Clay	
Cedar st., easterly.....	400	10"	Clay	341.81
				1,520.73
Central st., Main st., easterly..	99	15"	Cem.	147.60
	546	12"	Cem.	385.49
Main to near Maple st.....	527	2'- 0"x3'-0"	Brick	2,275.08
	700	1'- 8"x2'-6"	Brick	
near Maple street to Sterna terrace.....	769	18"	Clay	1,211.88
	105	12"	Clay	199.95
Sterna terrace to Cedar st....	334	18"	Cem.	102.50
Pine st., westerly.....	500	12"	Cem.	568.42
Pine to Spruce st.....	339	12"	Cem.	376.00
	335	12"	Clay	514.05
	310	10"	Clay	
Spruce to Hancock st.....	861	20"	Clay	1,344.35
Hancock st. to Mill st.....	597	2'- 0"x3'-0"	Brick	2,135.31
Mill st. to Mill river.....	40	24"	Clay	136.83
Central st. place, Knox to Cen- tral st.....	279	10"	Cem.	197.64
	285	12"	Cem.	44.07
				241.71
Chapel street, Eastern avenue, easterly.....	400	10"	Clay	208.13
Chapin terrace, Chestnut street, easterly.....	327	15"	Clay	1,124.82
	279	12"	Clay	
Chase ave., Fort Pleasant ave., easterly.....	238	12"	Clay	24.49
	333	10"	Clay	
Charles st., Liberty to Frank- lin.....	27	12"	Clay	647.16
	620	12"	Cem.	
Liberty st., southerly.....	29	12"	Clay	12.94
Charter ave., Walnut street, easterly.....	527	12"	Clay	660.10
				475.20
Cherrylna ave., Phoenix ave., southerly.....	300	15"	Clay	410.62



## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Cherry lane, Mill river to Central street.....	398	18"	Clay	\$1,484.
	434	15"	Clay	
	251	12"	Clay	
	295	10"	Clay	
Cherryvale ave., Longhill street to Florentine gardens.....	596	10"	Clay	15.
Chester st., Mill st., northerly.	459	12"	Clay	\$509.11
	161	10"	Clay	
	112	8"	Clay	
Chestnut st., Edwards street, southerly.....	575	12"	Cem.	579.02
Mattoon st., southerly.....	288	15"	Cem.	319.69
Pearl to Mattoon st.....	313	1'- 4"x2'-0"	Brick	445.40
Pearl to Bridge st.....	143	1'- 8"x2'-6"	Brick	599.51
Bridge to Worthington st.....	480	2'-0" cir.	Brick	.....
Worthington to Taylor st.....	60	18"	Cem.	291.17
	244	12"	Cem.	
	134	18"	Cem.	
Lyman st. to B. & A. R. R...	72	12"	Cem.	355.41
Franklin st., southerly.....	500	12"	Cem.	358.75
Franklin st., northerly.....	397	12"	Cem.	294.14
Essex to Everett st.....	374	15"	Cem.	586.72
Carew st., southerly.....	126	8"	Clay	100.68
Carew to Prospect st.....	424	24"	Clay	1,618.64
	537	20"	Clay	
	220	12"	Cem.	
Prospect st., northerly.....	172	12"	Cem.	178.88
Bancroft st., southerly.....	108	12"	Cem.	123.00
	19	10"	Clay	190.55
	391	15"	Cem.	
Bancroft to Montmorenci st.				535.24
Bancroft st. to Montmorenci st. (see Bancroft st.).....	.....	3'- 2"x4'-9"	Brick	.....
Montmorenci to Waverly st..	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly.....	450	10"	Clay	385.61
Douglas to Springfield (see Springfield st.).....	.....	3'-6" cir.	Brick	.....
Merwin st., southerly.....	178	10"	Clay	.....
Eagle st., northerly.....	87	15"	Clay	.....
Eagle st., southerly.....	171	10"	Clay	.....
Chestnut st., I. O., Worcester to Hampden st.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st....	307	15"	Clay	342.65
Church st., Garden brook to North st.....	556	18"	Clay	1,440.68
	80	15"	Cem.	157.23
				1,607.9

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Churchill st., Sumner ave. to Garfield st.....	580 55	12" 8"	Clay Clay	84.12 6.89
				\$91.01
Clantoy st., Phoenix avenue to Dupont st.....	398 517 241	15" 12" 10"	Clay Clay Clay	1,130.95
Clarendon st., Worthington st., westerly.....	205	10"	Clay	
Worthington to St. James ave. St. James ave. to Sherman st.	336 280 605	18" 15" 12"	Cem. Clay Clay	
				225.80 1,859.31 2,085.11
Clark st., Hancock st., west- erly.....	520	10"	Clay	531.80
Clayton street, Plainfield street, westerly.....	299	18"	Clay	583.76
Cleveland street, Armory to Liberty st.....	274 250 276 284	18" 15" 12" 10"	Clay Clay Clay Clay	790.48
	250 119	12" 10"	Clay Clay	
Clifford st., Bay st., northerly..				
Clifton avenue, Central street, southerly.....	406	8"	Clay	113.04
Cliffwood street, Sumner ave., southerly.....	464	10"	Clay	37.90
Clinton street, Fulton to Boyle- ton street..	150	10"	Clay	2,207.90
Boylston st., easterly.....	410	12"	Cem.	
submerged outlet.....	176 24	24" 24"	Wood C. Iron	
Conn. river to Fulton street. Fulton st., Clinton to Sar- geant street.....	593	4'-10"x7'-3"		26,137.87
Sargeant st., Fulton to Main street.....			Brick	
Carew st., Main st. to Garden brook.....				
(For lengths and sizes see in- dividual streets.)				
**College ave., State st. to Shat- tuck ave.....	839	12"	Clay	139.62
Shattuck ave., to Acorn street	311 900	12" 10"	Clay Clay	457.62
				597.24
College st., State st. to Wilbra- ham road.....	34 443	12" 10"	Clay Clay	349.92

\*\*Sanitary sewer.

## SEWER SYSTEM—Co

NAME OF SEWER	Length in Feet	Size
Collins st., Eastern avenue to Logan st.....	300 269	12" 10"
Colonial avenue, State street, southerly.....	326 348	12" 10"
Colton st., Wilbraham road to Beacon st.....	448 569 658	18" 15" 12"
Columbia terrace, Liberty st., north and east.....	498	10"
Commonwealth ave., Belmont avenue, to Washington ave.	441 500 549	24" 20" 18"
Washington ave. to Fairview street.....	691	15"
Congress st., Garden brook to Main st.....	53 319 133 198 369 288 119 76	12" 12" 20" 18" 15" 12" 15" 10"
Garden brook to Chestnut st.		
Continental st., Sumner avenue, southerly.....	215 266	12" 10"
Converse street, Sumner ave., to Vermont st. ....	506	18"
Cook's ave., Worthington st. to N. Church ave. ....	117	15"
N. Church avenue, southerly (includes cost of N. Church ave.).....	69	10"
Cornell st., Dartmouth terrace to Wellesley st.....	185 374 186	15" 12" 10"
Wellesley street, easterly ....	52 86	10" 8"
Princeton st., westerly .....	181 120	10" 10"
Princeton st., easterly.....		

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Courtland street, State street, northerly.....	164 621	15" 12"	Clay Clay	8672.01
Cottage ave., (see Melrose st.)				
Court st., Water st., easterly..	273	12"	Cem.	6226.15
Court Square ave., westerly..	431	12"	Cem.	553.45
Main st. to Court Square ave.	200	12"	Cem.	809.67
				1,089.27
Crosby st., Walnut st., westerly	321	10"	Clay	231.38
Cross st., Main to Willow st....	388	18"	Clay	
Willow st., easterly.....	363	12"	Cem.	878.12
				311.86
Crystal ave., Belmont avenue, easterly.....				1,169.68
	251	15"	Clay	34.07
	250	12"	Clay	
	298	10"	Clay	
	362	15"	Clay	
*Dickinson st., westerly.....	372	12"	Clay	650.64
				674.71
Cumberland st., Chestnut st., westerly.....	167	10"	Clay	125.29
North Main st., easterly.....	205	15"	Clay	300.96
				426.25
Cypress ave., Cypress street, northerly.....	360 40	12" 12"	Cem. Clay	484.08 23.78
				507.86
Cypress street, Conn. river to Garden brook in Ferry street.....	1,081	3'- 4"x5'-0"	Brick	10,048.85
†Connecticut river to Fulton street.....	385	4'-10"x7'-3"	Con.	3,390.53
†Fulton st., to Main st.....	691	4'- 2"x6'-3"	Con.	6,470.80
				20,410.18
Dale st., northerly from sewer 60 ft. south of Hubbard ave.....	203	10"	Clay	184.27
Winthrop st., southerly.....	46	8"	Clay	13.08
				197.35
Dartmouth st., St. James ave. to Yale st.....	973	3'- 0"x4'-0"	Brick	8,247.06
Yale to Bowles st.....	295	2'- 0"x3'-0"	Brick	
Dartmouth ter., Worthington st. to Cornell st.....	499 357 177	20" 18" 15"	Clay Clay Clay	2,213.06
Davis court, Bridge street to Harrison ave.....	450	12"	Clay	500.67
Dawes st., Bay st., southerly..	229 380 518	15" 12" 10"	Clay Clay Clay	165.40

\*Surface drainage only.

†Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Dawson ave., White street, westerly.....	350	10"	Clay	\$9
Daytona st., Belmont ave. to Sumner ave.....	524	12"	Clay	50
Demond avenue, Flak avenue, westerly.....	510	12"	Clay	60
Plainfield st., easterly.....	403	12"	Clay	
Dexter st., Knox to Pine street.	558	12"	Cem.	
	226	10"	Clay	\$60.83
				245.10
				30
Dickinson st., Mill st. to Sum- ner ave.....	35	4'-6" cir.	Brick	44,552.11
	60	2'-1"x5'-0"	Brick	
	251	8'-0" cir.	Brick	
	679	4'-0" cir.	Brick	
	*460	4'-10"x7'-3"	Brick	
	*869	4'-8"x7'-0"	Brick	
	*1,040	4'-4"x6'-8"	Brick	
	*996	4'-2"x6'-3"	Brick	8,760.53
Sumner ave., southerly.....	1,379	2'-6"x3'-9"	Brick	
	324	2'-4"x3'-8"	Brick	
	434	2'-0"x3'-0"	Brick	
	312	1'-10"x2'-9"	Brick	
				53,311
Donald st., Birnie ave., east- erly.....	315	10"	Clay	40
Dorchester st., St James ave. to Amherst st.....	364	12"	Clay	39
	238	10"	Clay	
Dorn st., Smith st., northerly.	219	12"	Clay	183
Douglas st., B. & M. R. R. to North Main st. (see Row- land ave.).....				
North Main to Chestnut st..	424	4'-6" cir.	Brick	4,605
	442	4'-0" cir.	Brick	
Dresden avenue, State street, southerly.....	359	12"	Clay	25
	321	10"	Clay	
*Dwight st., Sanford to State Sanford to Harrison ave.....	258	2'-8"x4'-0"	Brick	1,571.86
	253	20"	Clay	1,441.27
	229	18"	Clay	
	199	15"	Clay	
Harrison ave., northerly.....	100	15"	Cem.	144.41
Hillman st., southerly.....	226	10"	Clay	257.25
Hillman st., northerly.....	103	10"	Clay	388.28
Worthington st., southerly...	269	12"	Clay	433.91
Worthington st., northerly...	342	12"	Cem.	374.73
				4,611
Dymon st., Walnut st., easterly	415	12"	Cem.	385

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Eagle street, North Main to Chestnut st.....	643	15"	Clay	.....
East Court st., Dwight street, westerly.....	206 62	12" 10"	Clay Clay	\$303.10
East Hooker street, North Main street to North street.....	444 255	10" 10"	Cem. Clay	
				\$39.04 .....
				39.04
Eastern ave., Watershop pond to Manhattan st.....	1,164	24"	Clay	2,164.43
Manhattan to Alden st.....	338	20"	Clay	636.31
Alden to Collins st.....	231	12"	Clay	313.99
Greene st., southerly.....	125	8"	Clay	69.58
Greene to Ladd st.....	38	15"	Clay	27.25
Olive st., southerly.....	169	8"	Clay	152.29
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon st. to King st.....	194	12"	Cem.	331.17
	55	12"	Clay	95.43
King st. to Chapel st.....	152	10"	Cem.	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly.....	312	12"	Cem.	190.38
Tyler st., northerly.....	286	12"	Cem.	181.30
Quincy st., northerly.....	118	10"	Cem.	131.15
Monroe st., southerly.....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly.....	39	12"	Cem.	51.50
	128	8"	Clay	90.66
				5,166.59
Edgemont st., State street, northerly.....	499 201	10" 8"	Clay Clay	510.70
**Edgewood st., Acorn to Bay st	1,001	8"	Clay	
Edwards st., Chestnut street, easterly.....	551	12"	Cem.	404.83
Ellett st., Salem st., southerly.....	610 243	15" 12"	Cem. Cem.	730.48 309.08
				1,039.56
Elm st., submerged outlet.....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st.....	385	3'-9" cir.	Brick	10,744.19
Water st. to Main st.....	996	3'-8"x5'-8"	Brick	
Elmwood street, Main st. to Hanover st.....	300 249 299	18" 15" 12"	Clay Clay Clay	12,804.78 1,058.02
Emery st., Boylston st., east and west.....	542	12"	Cem.	616.36
Essex street, Garden brook, westerly.....	418	15"	Cem.	355.00

\*\*Sanitary sewer.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Garden brook to Chestnut st.	1,115	2'- 3"x3'-3"	Brick	\$7,106.10
	204	18"	Cem.	383.33
Essex st., I. O., Oak to Myrtle street	254	12"	Clay	662.25
	426	10"	Clay	
	183	10"	Clay	
Oak st., easterly				248.23
Eschold ave., Belmont ave. to Dickinson st.	389	12"	Clay	1,102.00
	741	10"	Clay	
	77	8"	Clay	
*Dickinson st., westerly	350	15"	Clay	778.10
	350	12"	Clay	
Dickinson st., easterly	275	10"	Clay	307.83
				2,223.00
Everett st., Chestnut street to brook	323	18"	Cem.	308.39
brook to Cass st.	926	18"	Clay	831.43
Cass st., easterly				194.35
Fairbanks place, Worthington st., northerly	249	10"	Clay	1,234.17
Fairfield street, Litchfield to Garfield st.	376	12"	Clay	726.06
	556	10"	Clay	
Fairmount st., Commonwealth ave. to Lawndale st.	350	10"	Clay	331.04
Farnsworth st., Hamburg street, northerly	530	20"	Clay	173.17
Federal st., Worthington to Pearl st.	567	12"	Cem.	1,033.14
Summer st., southerly	274	10"	Clay	
				740.92
				172.00
				912.03
Ferry st., Main to Garden brook (see Cypress st.)				
Garden brook to Chestnut st.	1,168	2'- 4"x3'-6"	Brick	5,417.13
Main st., easterly	†394	4'- 2"x6'-3"	Con.	11,067.20
	1,004	4'-9" chr.	Con.	
				10,484.41
Firglade ave., Sumner ave. to Spruceland st.	350	10"	Clay	46.01
	203	8"	Clay	
Spruceland to Pinewoods avenue	447	10"	Clay	
	67	8"	Clay	
Pinewoods ave. to Washington boulevard	242	12"	Clay	395.64
	176	10"	Clay	
Pisk ave., Rowland to Worcester ave.	272	24"	Clay	1,073.11
	275	20"	Clay	
	298	10"	Clay	

\*Surface drainage only.

†Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Wason ave., southerly.....	299	24"	Clay	\$1,216.81
	294	20"	Clay	
	248	12"	Clay	
Florence st., Pine st., easterly.	884	18"	Cem.	2,227.38
	661	18"	Cem.	
Hancock st., easterly.....	283	10"	Cem.	303.15
				2,530.53
Florentine gardens, Pineywoods				
ave., northerly.....	421	10"	Clay	33.88
Florida st., Worthington to				
Ingersoll Grove st.....	273	15"	Cem.	359.06
	561	12"	Cem.	523.88
Worthington to St. James ave.	935	2'- 3"x3'-3"	Brick	4,499.10
St. James ave. to Bay st....	599	24"	Clay	1,832.21
				7,314.25
Forest st., Belmont avenue to				
Forest Park ave.....	419	12"	Clay	651.93
	255	10"	Clay	
Forest Park ave., Fort Pleasant				
ave. to Garfield st.....	1,081	24"	Clay	1,217.48
	325	20"	Clay	
	562	18"	Clay	
Sumner ave., northerly.....	567	12"	Clay	123.15
Sumner ave., southerly.....	66	10"	Clay	318.29
	438	10"	Clay	
Pineywoods ave., northerly ..	380	10"	Clay	
				83.87
				1,692.79
Fort st., Main to Water st.....	633	12"	Cem.	633.43
Fort Pleasant avenue, Mill				
river to Sumner ave.....	888	2'- 4"x3'-6"	Brick	13,339.80
	1,825	2'- 0"x3'-0"	Brick	
Mill st., southerly.....	428	12"	Clay	293.42
				13,633.22
Franklin street, Garden brook				
sewer to Main st.....	434	18"	Cem.	593.13
Garden brook sewer to Chest-				
nut st.....	469	18"	Cem.	1,834.76
	735	15"	Cem.	
Chestnut to Charles st.....	273	15"	Clay	303.37
Charles st., easterly.....	670	12"	Clay	502.35
Cass st., to Webster st.....	621	12"	Clay	684.32
	70	10"	Clay	
Nursery st., westerly.....	207	15"	Clay	199.93
Nursery st. to Genesee st....	107	15"	Clay	
	557	15"	Cem.	57.66
	27	12"	Clay	
				4,175.52
Premont st., Main to Water st..	790	1'- 6"x1'-7"	Brick	702.45
Main st., westerly.....	656	12"	Cem.	692.92
	30	12"	Clay	65.21
				1,460.58



## SEWER SYSTEM—Con

NAME OF SEWER	Length in Feet	Size
Fulton st., Cypress to Clinton street.....	944	12"
*Clinton to Sargeant st. (cost shown under Clinton st.)..	1,080	4'-8"x7'-0"
	42	4'-10"x7'-3"
Sargeant to John st.....	555	18"
John st., northerly.....	314	12"
	408	10"
Garden brook sewer, (see private ways).		
Gardner ave., Gardner street, northerly.....	151	8"
Gardner st., Hanover to Water street.....	655	2'-0"x3'-0"
Water to Main st.....	226	12"
	199	10"
Garfield st., Forest Park ave., easterly.....	556	18"
	514	12"
Belmont ave., westerly.....	531	10"
Genesee street, Franklin street, southerly.....	200	10"
George st., Dexter st., southerly.....	409	10"
Girard ave., Bay street to McKnight st.....	947	12"
Gordon st., Pasadena ave. to White st.....	618	15"
Governor st., Armory st. to Penacook ave.....	96	30"
Grace st., Birnie ave., easterly.	274	15"
Grand ave., Revere st., easterly.....	250	15"
	252	12"
Revere st., westerly.....	151	10"
Grant st., Magazine to Armory street.....	588	12"
Granville st., Eastern ave. to Logan st.....	495	12"
Gray's ave., Cypress avenue, northerly.....	495	12"
Greene st., Hancock to Eastern ave.....	610	18"
	793	15"
Greene lane, Rimmon avenue, westerly and northerly....	744	12"
	143	10"

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	\$133.60
Greenwich st., Birnie avenue, easterly.....	300	12"	Clay	467.79
	300	10"	Clay	
Greenwood st., Garden brook to Main st.....	386	12"	Cem.	2,231.60
Garden brook, easterly.....	538	18"	Clay	
	113	12"	Clay	
	452	12"	Cem.	
Grenada terrace, Dickinson st. to Ventura st.....	220	18"	Clay	\$708.45
	310	15"	Clay	
Ventura st., easterly.....	309	12"	Clay	397.28
	216	10"	Clay	
Grasvener street, North to Chestnut street.....	131	18"	Cem.	1,105.73
	648	15"	Cem.	721.17
Grove st., North Main street, easterly.....	409	10"	Clay	442.65
North st., westerly.....	270	10"	Clay	
Greveland ave., Dickinson st., to town line.....	533	12"	Clay	506.13
	117	10"	Clay	
Grever street, Armory street to Liberty st.....	300	18"	Clay	910.58
	303	15"	Clay	
	298	12"	Clay	
	432	10"	Clay	
Hall st., Belmont ave. to Dick- inson st.....	500	12"	Clay	904.55
	474	10"	Clay	
*Dickinson st., southerly.....	774	12"	Clay	698.29
				1,602.84
Hamburg st., Springfield street, easterly.....	367	20"	Clay	1,067.20
	235	10"	Clay	
Hampden st., Water street to Main street.....	569	15"	Cem.	762.57
Hampden st., I. O., Chestnut st., easterly.....	285	12"	Cem.	187.28
	174	12"	Clay	299.12
Holly st., easterly.....	150	10"	Clay	165.26
Pine st., westerly.....	200	12"	Clay	311.59
	199	10"	Clay	
				963.25
Hampshire st., I. O., Oak st., westerly.....	300	12"	Clay	633.59
	398	10"	Clay	

\*Surface drainage only.

## SEWER SYSTEM—Co

NAME OF SEWER	Length in Feet	Size
Oak st., easterly.....	250	12"
Myrtle st., westerly.....	300	10"
Hancock street, Mill river to		
Central st.....	920	12"
Central to Walnut st.....	218	18"
	1,343	15"
Walnut to Alden st.....	122	12"
Lebanon to Alden st.....	827	3'- 0"x3'-0"
Walnut (through Lebanon)		
to Quincy st.....	1,853	3'- 0"x3'-3"
Quincy to State st.....	913	3'- 4"x3'-0"
Hanover st., York st. to Gard-		
ner st.....	830	2'- 2"x3'-3"
Harriet st., North Main st. to		
North st.....	250	15"
	207	12"
North st., easterly.....	330	10"
Harrison ave., Main street to		
Chestnut st.....	600	15"
	250	8"
Harvard st., Yale to St. James		
ave.....	316	18"
	300	15"
	291	12"
St James ave. to Cornell st..	736	12"
Hawley st., Wilbraham road to		
Monroe st.....	181	12"
	330	10"
Hawthorn st., Hancock street,		
westerly.....	441	12"
Hayden st., State st., northerly.	335	12"
	299	10"
	222	8"
Hebron st., North to Chestnut		
street.....	663	12"
Hickory st., Mill river inter-	754	20"
cepting sewer to Alden st...	228	18"
	184	15"
	788	12"
High street, Maple street to In-	523	18"
graham ave.....	567	15"
	550	12"
Ingraham ave., easterly.....	846	12"
Hillman st., Main to Dwight		
street.....	350	15"
	380	12"

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Hillside place, Richelieu court, easterly.....	106	8"	Clay	.....
Holly st., I. O., Worrester to Hampden st.....	377	15"	Clay	\$419.11
Hampden st., southerly.....	175	12"	Clay	117.69
Hollywood st., Commonwealth ave., easterly.....	211	12"	Clay	\$526.80
	241	10"	Clay	445.87
Holyoke street, Main st., west- erly.....	734	12"	Cem.	987.24
Huma street, Liberty st., west- erly.....	424	10"	Clay	302.25
Homor st., State st., southerly.....	31	12"	Clay	
	370	10"	Clay	87.00
Horace st., Dickinson street, northerly.....	363	12"	Clay	
	411	10"	Clay	783.12
Howard st., Main st., westerly.....	344	15"	Clay	
	321	12"	Clay	837.22
Water st., easterly.....	276	12"	Cem.	255.78
	30	12"	Clay	43.40
Water st., westerly.....	314	12"	Cem.	326.98
	31	12"	Clay	43.47
				1,506.85
Hubbard ave., Main street, easterly.....	257	15"	Clay	
	321	12"	Clay	630.47
Hunt terrace, Allen street, northerly.....	304	10"	Clay	.....
Hunter place, State street, northerly.....	350	12"	Clay	
	313	10"	Clay	602.72
Huntington st., Birnie avenue, easterly.....	300	12"	Clay	
	300	10"	Clay	416.95
Hyde ave., Flak ave. to Plain- field st.....	301	15"	Clay	
	300	12"	Clay	
	219	10"	Clay	712.99
Ingersoll grove, Worthington st., northerly.....	782	12"	Cem.	
	218	8"	Clay	1,038.85
Bowdoin st., easterly.....	132	10"	Clay	106.53
Irrington ave., Sumner ave., to Morningside park.....	300	12'	Clay	1,145.38
	400	10'	Clay	180.95
Jackson street, Sumner avenue, southerly.....	460	10"	Clay	
	140	8"	Clay	56.78

## SEWER SYSTEM—C

NAME OF SEWER	Length in Feet	Size
Granville st., northerly.....	200	10"
Lombard st., Water street, east- erly.....	500	12"
Longfellow terrace, White st., westerly.....	246	12"
	200	10"
Loughill st., submerged outlet..	26	18"
	290	18"
	28	18"
Conn. river to Washington avenue.....	1,310	24"
(See Washington avenue.)...	346	2'- 4"x3'-0"
Washington ave., northerly..	399	15"
	512	12"
	160	10"
Sumner avenue, southerly...	356	8"
Warner pl. to Sumner ave....	423	10"
Main st. to Warner place....	136	24"
	265	18"
	350	15"
	400	12"
	240	10"
	90	2'- 0"x3'-0"
Loring st., Water st., easterly..	607	12"
	40	12"
Lowell street, Conn. river to Plainfield st.....	305	18"
	396	15"
	396	12"
	283	10"
Lyman st., Main to Chestnut street.....	1,335	2'- 0"x3'-0"
Chestnut to Spring st.....	504	15"
	216	15"
Lyndale street, Belmont ave., northerly.....	350	15"
	300	12"
	324	10"
Lyons st., I. O. Main street, northerly.....	261	18"
Madison ave., Central street, northerly.....	250	12"
	287	10"

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Magazine st., Worthington to Lincoln street.....	682 249	18" 15"	Cem. Cem.	\$1,211.05
Magnolia ter., east side, Sum- ner ave. to Spruceland ave. west side, Sumner avenue to Spruceland ave.....	620 621	10" 10"	Clay Clay	
overflow connection between east and west side.....	62	8"	Clay	25.00
Washington ave. to Spruce- land avenue.....	362 602	24" 12"	Clay Clay	21.08
Main st., Pecouse avenue to Longhill st.....	191	2'- 4"x3'-0"	Concrete	1,077.51
Mill river to Mill st.....	258	10"	Clay	242.86
Locust st., southerly.....	800	15"	Cem.	1,430.27
York to B. & A. R. R.....	56	7'-0" chr.	Brick	20,812.99
	1,772	0'-0" chr.	Brick	
	906	5'-0" chr.	Brick	
	990	8'-0" chr.	Brick	
	1,624	3'- 4"x5'-0"	Brick	
	864	2'- 4"x3'-0"	Brick	34,453.56
	263	12"	Clay	164.82
Gypress to Emery st.....	298 370	15" 12"	Clay Clay	1,210.56
Emery st., southerly.....	278	12"	Cement	399.20
Emery st. to Sargeant.....	341 442 480 186	24" 20" 18" 15"	Clay Clay Clay Clay	2,539.81
Main st., I. O., Chicopee river to Pine st.....	2,321	2'- 4"x3'-0"	Brick	7,696.81
Pine to Cedar st.....	500 185 103	18" 15" 12"	Cem. Cem. Clay	870.78
Cedar to Lyons st.....	1,110	2'- 0"x3'-0"	Brick	5,024.19
Chicopee river through pri- vate land and Main st. to Beaudry street.....	699 232 212	18" 15" 10"	Clay Clay Clay	1,590.17
Parker st., westerly.....	260	12"	Clay	254.89
Lyons st., easterly.....	205 245 129	24" 18" 12"	Clay Clay Clay	1,334.58
Malden st., Allen st., southerly.	542 291 494	15" 12" 10"	Clay Clay Clay	16,779.91 25.75

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Manhattan st., Eastern ave. to Walnut st.....	290	18"	Clay	} 8475.51
	645	12"	Clay	
	205	10"	Clay	
Maple st., State to Temple st..	315	18"	Clay	51.55
Park to High st.....	235	18"	Clay	505.21
Union st., southerly.....	515	18"	Cem.	} 959.12
	135	12"	Cem.	
Central st., southerly.....	33	18"	Cem.	} 160.95
	358	12"	Cem.	
	784	12"	Clay	} 4,289.58
Pine st., northerly.....	195	18"	Cem.	
	522	12"	Cem.	1,092.44
Mapledell street, State street, northerly.....	337	18"	Clay	}
	300	12"	Clay	
	346	10"	Clay	
Maplewood ter., Fort Pleasant ave., easterly.....	682	15"	Clay	}
	329	12"	Clay	
	178	10"	Clay	
Marble st., Main st., easterly..	222	18"	Cem.	}
	586	15"	Cem.	
	242	12"	Cem.	
Marengo Park, Belmont ave., easterly.....	443	15"	Clay	}
	612	12"	Clay	
	778	10"	Clay	
Margaret st., Water st., west- erly.....	520	12"	Cem.	540.89
Water st., easterly.....	825	12"	Cem.	855.32
	30	12"	Clay	31.41
Marion st., Bay st., southerly..	833	12"	Clay	} 915.66
Chapin st., easterly.....	94	10"	Clay	
	319	8"	Clay	
Market st., State st., northerly.	119	10"	Clay	.....
Sanford st., southerly.....	200	12"	Clay	412.04
Sanford st., to Harrison ave..	301	15"	Clay	} 1,197.72
	350	12"	Clay	
Harrison ave., southerly.....	154	12"	Cem.	.....
Marshall place (see Melrose P P street).....				
Marvin st., Pratt st., southerly.	149	10"	Clay	
Mason place, Dickinson street, southerly.....	200	12"	Clay	}
	276	10"	Clay	

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Mason st., State to Pease st. . . . .	349	15"	Clay	\$746.99
	359	12"	Clay	
Massachusetts ave., Wilbraham road, southerly . . . . .	300	18"	Clay	953.68
	300	12"	Clay	
	227	10"	Clay	
Massasoit place, Massasoit st., easterly . . . . .	381	12"	Clay	.....
Massasoit st., Carew street, northerly . . . . .	709	12"	Cem.	\$579.69
Lexington ave., southerly . . . . .	300	12"	Clay	258.56
	250	10"	Clay	
Montmorenci st., southerly . . . . .	233	10"	Clay	168.93
Montmorenci st., northerly . . . . .	152	10"	Clay	113.14
Mattoon street, Chestnut to Salem st. . . . .	356	1'- 4"x2'-0"	Brick	1,120.32
	87	15"	Cem.	778.21
Maynard st., State st., to Shattuck ave. . . . .	431	15"	Clay	607.83
	400	12"	Clay	
McKnight st., Catharine to Sherman st. . . . .	255	15"	Cem.	421.43
	30	15"	Clay	56.78
Catharine to Bowles st. . . . .	141	10"	Cem.	67.27
	26	10"	Clay	75.32
Bowles street to Girard ave. . . . .	119	12"	Cem.	81.85
	263	10"	Clay	233.51
Mechanic st., Water street, westerly . . . . .	302	12"	Cem.	936.15
	20	8"	Clay	72.99
Medford street, Birnie avenue, easterly . . . . .	390	12"	Clay	278.24
	183	10"	Clay	367.29
Melrose street, sewer between Hickory st. and Melrose . . . . .	429	18"	Clay	
Eastern ave. to Walnut st. . . . .	263	15"	Clay	
	558	10"	Clay	
Marshall place, Eastern ave. to Walnut . . . . .	415	10"	Clay	1,577.08
	169	8"	Clay	
Cottage avenue, Melrose to Marshall place . . . . .	74	12"	Clay	
Merrick avenue, King street, southerly . . . . .	301	12"	Cem.	49.50
Merwin street, North Main to Chestnut st. . . . .	774	15"	Clay	.....
Middlesex street, Wilbraham road, southerly . . . . .	296	15"	Clay	580.26
	304	12"	Clay	



## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Mill river, intercepting sewer, Mill river to Locust st.....	370	5'-3" cir.	Brick	\$6,066.64
	891	4'-0" cir.	Brick	
Locust st. to Hickory st.....	587	4'-0" cir.	Brick	42,700.00
	131	3'-0"x5'-3"	Brick	
	1,743	5'-9" cir.	Brick	
	779	4'-3" cir.	Brick	
	1,611	3'-3" cir.	Brick	9,355.23
*in Mill and Hickory sts.....	833	2'-2"x3'-3"	Brick	
*Hickory st. to Gunn square brook by northerly shore of Watershops pond.....	4,495	2'-2"x3'-3"	Brick	45,545.71
				\$108.6
Mill st., Main st., easterly.....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-0"x3'-9"	Brick	4,764.79
				4.4
Moumouth st., Dorchester st., northerly and easterly.....	199	12"	Clay	218.15
	171	10"	Clay	121.75
Yale st., westerly.....	64	12"	Clay	45.95
	278	10"	Clay	281.47
Berkeley st., northwesterly...	350	12"	Clay	235.62
				9
Monroe st., Hancock to Eastern avenue.....	611	18"	Cem.	1.9
	789	15"	Cem.	
Eastern ave. to Colton st....	316	12"	Cem.	
Monson ave., Greene street, northerly .....	200	8"	Clay	...
Montmorenci st., Chestnut to Massasoit st.....	64	12"	Clay	74.82
	612	2'-10"x4'-5"	Con.	2,725.07
				2.7
Montrose st., State to Burr st..	338	15"	Clay	}
	217	12"	Clay	
	329	10"	Clay	
Mooreland ave., Carew street, northerly to Van Horn ave.	601	18"	Clay	}
	301	15"	Clay	
	299	12"	Clay	
	212	10"	Clay	
				1.4
Morgan st., Garden brook to Main st.....	252	12"	Cem.	199.08
	25	18"	Cem.	48.07
	634	18"	Clay	1,460.31
				1.7
Morris st., Main st., easterly..	915	2'-0"x3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
				3.4

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Mountainview street, Forest Park ave., easterly.....	297 297	12" 10"	Clay Clay	} \$28.19
Mulberry st., Maple st., east- erly and northerly.....	687 629 246	15" 12" 10"	Cem. Cem. Clay	
west from Ridgewood ter- race.....	144	15"	Clay	233.59
Murray Hill ave., Liberty street, northerly.....	.....	.....	Clay	1,479.77
Myrtle st., Card Factory Pond brook, northerly.....	107 237	10" 8"	Clay Clay	98.24
Myrtle st., I. O., Main to Wor- cester.....	377	24"	Clay	1,003.44
Worcester st., southerly.....	378	10"	Clay	355.34
Berkshire st., southerly.....	180	10"	Clay	189.63
Hampshire st. to Essex.....	275	10"	Clay	310.44
Nelson ave., Greene street, northerly.....	90	12"	Cem.	27.96
Lebanon st. to King.....	188 67	10" 10"	Cem. Clay	126.54 93.63
Nelson street, Nursery street, easterly.....	308	24"	Clay	248.13
New street, E. Court st., north- erly.....	237 33	12" 8"	Cem. Clay	213.02 14.18
Dwight st., westerly.....	164	10"	Clay	203.79
Newman st., Knox st., west- erly.....	176	12"	Cem.	430.99 11.49
Norfolk st., Wilbraham road, southerly.....	300 300 229	15" 12" 10"	Clay Clay Clay	566.08 155.85
North st., Carew st., northerly.	190	8"	Cem.	84.88
Church to Grosvenor st.....	68	18"	Cem.	157.13
Morgan to Ringgold st.....	198	18"	Cem.	356.84
Osgood to Hebron st.....	130 165	18" 10"	Clay Clay	426.88
Bancroft st. to Breakline ave.	302	18"	Clay	411.55
Bancroft st., northerly.....	183 64	12" 12"	Cem. Clay	217.15
Jefferson ave., northerly.....	233	8"	Clay	197.21
Calboun st., northerly.....	236	8"	Clay	48.13
Waverly to Grove st.....	362	12"	Clay	302.86
Harriet st., southerly.....	86	8"	Clay	.....
Harriet st., northerly.....	150	10"	Clay	106.43
				2,309.08

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost	
Northampton ave., Wilbraham road, southerly.....	1,101	12"	Clay	\$830.79	
Gunn square, northerly.....	126	10"	Clay	103.71	
					8
North Church ave., Cook's ave., easterly .....	209	10"	Cem.	}	
Cook's avenue, westerly (for cost see Cook's ave.) .....	133	10"	Cem.		
No. Main st., Morgan st. south'y	232	8"	Clay	171.18	
Morgan st., northerly .....	173	8"	Clay	90.69	
Arch to Osgood st. ....	730	15"	Cem.	713.66	
*Arch st. to Jefferson ave. ....	185	2'- 2"x3'-3"	Brick	974.27	
Jefferson ave. to Grove st. ....	359	24"	Clay	}	
	420	20"	Clay		
	285	15"	Clay		2,568.01
Grove st., northerly .....	170	12"	Clay	226.48	
Douglas to Harriet st. ....	551	1'- 8"x2'-6"	Brick	1,874.35	
Harriet to Waverly st. ....	250	24"	Clay	470.75	
Douglas to Eagle st. ....	326	2'- 4"x3'-6"	Brick	}	
	272	1'-10"x2'-9"	Brick		1,840.24
Eagle st., northerly .....	142	24"	Clay	449.66	
Wason ave., southerly .....	215	2'- 0"x3'-0"	Brick	860.00	
Wason ave., northerly .....	348	12"	Clay	281.41	
Norwood st., Main to Hanover street .....	1,051	12"	Cem.		10.1
Nursery st., Liberty to Frank- lin street .....	694	2'-8" cir.	Brick	2,284.52	1.
Franklin st., northerly .....	587	2'-8" cir.	Brick		
					2.
Oak st., Union to State .....	741	2'- 0"x3'-0"	Concrete	3,092.11	
Union to Tyler st. ....	220	18"	Clay	}	
	268	15"	Clay		752.00
Walnut st. to Tyler st. ....	158	18"	Cem.	280.65	
					4.
Oak st., I. O., Chicopee river to Main st. ....	684	4'-0" cir.	Concrete	4,276.11	
North from Main st. ....	179	15"	Cem.	}	
	171	12"	Cem.		637.00
Main st., southerly .....	590	2'- 2"x3'-3"	Brick	2,345.84	
brick sewer to Hampshire st.	797	24"	Clay	1,652.79	
Hampshire st., southerly .....	285	18"	Clay	}	
	300	15"	Clay		
	400	12"	Clay		1,562.43
Oak Grove ave., State street, northerly .....	349	18"	Clay	}	10.
	327	15"	Clay		
	158	12"	Clay		
	256	12"	Clay		

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Oakland street, Belmont ave., southerly.....	311	10"	Clay	\$330.77
Belmont ave. to Dickinson st.	895	24"	Clay	2,218.71
Dickinson to Orange street..	254	24"	Clay	1,619.20
	350	18"	Clay	
	170	12"	Clay	
	218	8"	Clay	
Allen to Orange street.....	625	18"	Clay	1,428.06
	304	15"	Clay	
	193	12"	Clay	
	404	10"	Clay	
Sumner ave. to Garfield st...	280	12"	Clay	468.60
	221	10"	Clay	
Olive st., Eastern ave. to Logan street .....	540	10"	Clay	\$6,176.13 400.76
Orange street, Oakland st., east- erly.....	583	8"	Clay	996.11
White st., westerly.....	381	12"	Clay	
	649	10"	Clay	
White st., easterly.....	699	10"	Clay	
Orchard st., Plainfield street, westerly.....	325	20"	Clay	1,016.67
	301	15"	Clay	
	297	12"	Clay	
	494	10"	Clay	
Orleans court, Orleans street, westerly.....	205	8"	Clay	.....
Orleans st., Union st., north- erly.....	39	12"	Cem.	36.23
	310	12"	Clay	456.19
	330	10"	Clay	
Tyler st., northerly.....	188	10"	Cem.	187.74
Pendleton ave., northerly....	231	12"	Cem.	327.73
Ormond st., Belmont to Sum- ner ave.....	275	10"	Clay	1,007.89 252.85
Osgood st., Garden brook to Main st.....	257	12"	Cem.	320.94
Garden brook to North st....	588	18"	Cem.	1,261.32
	92	18"	Clay	174.87
Orford st., Riverview terrace, northerly.....	63	12"	Clay	1,757.13 .....
Ozark street, Grand avenue, southerly.....	456	10"	Clay	23.58
Palmer avenue, Locust street, easterly.....	351	18"	Clay	1,190.78
	337	15"	Clay	
	14	12"	Cem.	
Park st. Main to Willow st....	395	24"	Clay	1,609.31
Willow to Maple st.....	200	24"	Clay	1,431.05
	557	18"	Clay	
				3,040.36

## SEWER SYSTEM—C

NAME OF SEWER	Length in Feet	Size
Parker st., I. O., Chicopee river to Main st.....	32	24"
	221	12"
Main st., southerly.....	1,098	24"
*Loon pond to B. & A. R. R..	1,227	12"
Parkside ave., Carew street to Van Horn ave.....	350	18"
	350	15"
	351	12"
	300	10"
Parkwood st., Sumner avenue, southerly.....	215	12"
	204	10"
Pasadena ave., White street, southerly.....	156	12"
	291	10"
Pasco st., I. O., Essex street, southerly.....	724	10"
Pattison st., Garden brook to Main street.....	214	10"
Garden brook, easterly.....	352	18"
	349	15"
	537	12"
Peabody lane, Willow street, westerly.....	216	10"
Pearl st., Chestnut to Spring street.....	514	24"
	447	20"
Spring st., easterly.....	190	1'-6" cir.
Pense st., Catharine to Bowles.	250	12"
Pecousie ave., Mill river to Main st.....	352	2'-8"x4'-0"
Pendleton ave., Walnut street to Hancock st.....	287	18"
	524	15"
	429	12"
Hancock st. to Eastern ave..	600	18"
	793	15"
Phoenix st., Liberty street, east- erly.....	236	18"
	250	15"
	89	10"
Pine street, Mill to Cedar st...	740	2'-6"x3'-9"
	1,529	3'-6"x5'-3"
	500	3'-10"x5'-9"
Cedar to Walnut st.....	62	18"
	884	15"
	631	12"

\*Surface drainage only.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Pine street, I. O., Main street, easterly .....	1,896	24"	Clay	\$4,170.03
Pine st. court, Pine st., east erly .....	348	10"	Cem.	266.39
Pineywoods ave., Washington ave., northeasterly .....	334	15"	Clay	..... \$25.62 .....
	263	12"	Clay	
Magnolia terrace, westerly .....	350	10"	Clay	
Magnolia terrace to Jackson st	343	20"	Clay	
	404	12"	Clay	.....
Jackson street to Forest Park avenue .....	341	12"	Clay	.....
				25.62
Plainfield st., Sargeant st., to Fulton st. ....	414	18"	Clay	2,525.13
	537	15"	Clay	
	456	12"	Clay	
	244	10"	Clay	
Washburn st. to West st. ....	154	12"	Clay	427.50
	203	10"	Clay	
Washburn to Roseland st. ....	331	2'-8"x4'-0"	Brick	1,555.00
	303	2'-0"x3'-9"	Brick	2,367.93
	287	2'-4"x3'-8"	Brick	4,518.58
	294	2'-2"x3'-3"	Brick	
Rowland st., southerly .....	648	2'-2"x3'-3"	Concrete	3,402.83
Rowland st. to Talcott ave. .	288	24"	Clay	1,208.95
	299	20"	Clay	
Talcott ave., northerly .....	216	10"	Clay	158.46
Wason ave. to Demond ave. .	304	24"	Clay	1,253.59
	249	20"	Clay	
	53	18"	Clay	17,417.96
Pleasant st., Bay st., southerly	296	12"	Cem.	249.74
Plymouth st., Fulton st., east- erly .....	375	10"	Clay	196.59
Pomona st., Sumner avenue, northerly .....	580	12"	Clay	459.94
	297	10"	Clay	204.92
Portland st., Birnie ave., east- erly .....	251	12"	Clay	664.86
	224	10"	Clay	351.35
Portsmouth street .....	212	12"	Clay	283.65
Pratt street, Chestnut to Mar- vin street .....	350	15"	Clay	869.53
	299	12"	Clay	
Prince st., King to Lebanon street .....	329	12"	Cem.	333.15
Princeton st., Bay to Amherst street .....	103	18"	Cem.	289.08

## SEWER SYSTEM—Co

NAME OF SEWER	Length in Feet	Size
	689	18"
	151	18"
Yale to Vassar st.....	665	12"
St. James ave. to Cornell st..	298	12"
<b>Private ways and private lands:</b>		
Armory Hill sewer from Armory st., through private grounds east of Armory st. to Worthington st.....	150 2'-5"x3'-7½"	
	900 2'-8"x4'-0"	
	249 2'-1"x3'-1½"	
Card-factory Pond, Woodworth ave., westerly between High and State sts. in front and around High school.....	751	12"
High school to State st.....	492	24"
	88	24"
Cemetery brook, Morris st., easterly, north of Central street.....	174	24"
Chester to Hancock street...	218	8"
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main street.....	2,936	5'-6" cir.
	766	5'-0" cir.
	1,303	4'-6" cir.
	236	3'-0"x4'-6"
Worthington st., northeasterly to Lyman st., thence via Railroad land to Armory street.....	3,274	4'-7½" cir
	952	4'-1" cir.
Hickory to Melrose street (see Melrose street).....		18"
Jefferson ave., passage way in rear of lots on south side...	135	2'-0"x3'-0"
	518	12"
Main to Dale st., between Hubbard ave. and William street.....	655	12"
Passage way, Ferry to Liberty st., 80 ft. east of Main st..	210	12"
Potter place, State st., northerly.....	396	15"
	301	12"
	274	10"
Sewer in ave. Hampden st., southerly, near Water st...	111	12"

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Springfield st. and Glenwood, via Atwater Glen.....	677 598 389 1,292 40 16 1,294	3'-0" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10"x4'-3" 24"	Brick Brick Brick Brick Brick Brick Clay	\$14,614.89      \$3,889.98
Prospect st., Chestnut street, easterly.....	218 199 196	18" 15" 12"	Clay Clay Clay	623.53
Pynchon street.....	950	2'-0"x3'-0"	Brick	
Quebec st., I. O., Lyons street, easterly.....	209	15"	Clay	
Queen street, Walnut to Han- cock street.....	634	12"	Cem.	634.22
Quincy st., Oak to Stebbins st.	860	12"	Cem.	819.90
Hancock to Stebbins st.....	522	12"	Cem.	549.58
Hancock to Eastern ave.....	637 765	18" 15"	Cem. Cem.	1,703.99
Colton to Eastern ave.....	208	10"	Clay	
				156.87
				3,030.40
Railroad st., Water st., easterly.	351	12"	Clay	490.75
Randolph street, Maplewood terrace, easterly.....	250 251	12" 10"	Clay Clay	.....
Ranney street, Wilmont street, northerly.....	200	10"	Clay	
Raymond ave., Carew street, northerly.....	277	10"	Clay	151.76
Reed st., State st., southerly...	219 309	12" 10"	Clay Clay	217.32
Revere st., White st., southerly.	750 250 209	20" 10" 8'	Clay Clay Clay	
				23.32
Richellon court, Adams street, southerly.....	160 260	12" 10"	Clay Clay	474.21
Richellon place, Richellon court, easterly.....	100	8"	Clay	
Ridgewood place, Mulberry st., northerly.....	400	12"	Clay	29.46
Ridgewood terrace, Mulberry street westerly.....	226	10"	Clay	.....
Rimmon ave., Greene lane to Weaver Ramble.....	859	18"	Clay	.....
Weaver Ramble, northerly...	200	12"	Clay	.....



## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Ringgold st., North to Chestnut street.....	117	18"	Cem.	} \$744.53
	632	12"	Cem.	
Ripley place, St. James avenue, southerly.....	230	10"	Cem.	163.48
Riverview st., Riverview terrace to Chase ave.....	63	10"	Clay	} .....
	310	10"	Clay	
Forest Park ave., southerly..	299	10"	Clay	\$254.50
				217.39
				571.80
Riverview ter., Fort Pleasant ave., easterly.....	298	15"	Clay	} .....
	322	12"	Clay	
	105	10"	Clay	
Rogers ave., I. O., Main street, southerly.....	97	15"	Clay	} 312.13
	152	12"	Clay	
Roseland st., Plainfield street, westerly.....	350	18"	Clay	} 1,362.31
	350	15"	Clay	
	173	12"	Clay	} .....
Rowland st., Conn. river to North Main st., including 630' in Douglas st.....	579	5'-3" cir.	Brick	
	51	1'- 8"x2'-0"	Brick	
	1,247	6'-0" cir.	Brick	
	1,330	6'-0" cir.	Brick	
				32,489.36
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge avenue, Main street, easterly.....	574	24"	Clay	49.43
Sachem street, Dickinson street, northerly.....	330	10"	Clay	345.31
Salem st., Pearl st., south and east.....	283	18"	Cem.	} 804.73
	99	15"	Cem.	
	290	12"	Cem.	
*Sanford street.....	536	3'- 2"x4'-9"	Brick	4,014.47
*Sargeant st., Fulton to Main (cost shown under Clinton street).....	920	4'- 6"x6'-9"	Brick	.....
School st., Union to Mulberry street.....	549	15"	Clay	620.95
Union st., northerly.....	282	10"	Clay	204.00
Scott st., White st. to Pomona street.....	300	12"	Clay	} 824.96
	347	10"	Clay	
Searle place, Walnut street, easterly.....	178	10"	Clay	231.61
Seventh st., Fulton to Main st.	830	12"	Cem.	700.00
Sewer in avenue (see private ways).				
Sewer (see private ways).				

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Sharon st., Garden brook to				
Main st.....	360	18"	Cem.	\$762.77
Garden brook, easterly.....	601	18"	Cem.	1,211.18
	463	12"	Cem.	
				\$1,973.95
Shattuck ave., Maynard ave.	200	10"	Clay	.....
to Willard ave.....	143	8"	Clay	
Willard ave., easterly.....	50	8"	Clay	
Shefford st., Springfield street,	293	12"	Clay	601.41
westerly.....	350	10"	Clay	
Shelden st., Birnie ave. to N.	311	12"	Clay	\$18.49
Main st.....	317	10"	Clay	
Sherman st., Bay to Clarendon				
street.....	175	12"	Cem.	571.12
Bay to McKnight st.....	443	12"	Cem.	
State to McKnight st.....	301	18"	Clay	1,314.14
	301	15"	Clay	
	544	12"	Clay	
				1,885.26
Silver st., Armory st., easterly..	302	15"	Clay	470.93
	297	12"	Clay	
Smith st., Knox to Dorn st...	199	12"	Clay	196.57
Sorrento ave., Summer avenue,				
northerly.....	325	12"	Clay	271.15
Grenada terrace, northerly...	367	10"	Clay	209.65
				480.80
Spring st., south from Lyman st.	281	15"	Cem.	2,479.25
	130	12"	Cem.	
Worthington to State st.....	470	18"	Cem.	
	640	15"	Cem.	
	644	12"	Cem.	87.28
Worthington st., northerly...	132	12"	Clay	
Worthington to Summer st...	183	5'-0" cir.	Brick	1,498.24
†.....	49	4'-3"x8'-0"	Brick	
Springfield st., Atwater terrace,				
northerly.....	892	20"	Clay	4,664.77
	360	18"	Clay	
	413	15"	Clay	
	296	12"	Clay	
	437	10"	Clay	3,337.44
Springfield st. and Glenwood				
(see private ways).				
Spruce street, Central street,				
northerly.....	600	12"	Cem.	558.03
Spruceland ave., Magnolia ter-				
race, westerly.....	67	8"	Clay	.....
Beachwood ave., easterly....	242	8"	Clay	136.48

†Segmental.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Beechwood ave., westerly....	299	8"	Clay	894.83
Longhill st., easterly.....	450	10"	Clay	410.40
Stafford st., Armory street, westerly.....	402	10"	Clay	
State st., Water st., westerly....	70	12"	Cem.	45.27
	91	12"	Cem.	71.19
	82	12"	Clay	83.01
Water st., to Main st.....	907	18"	Clay	1,199.78
Main to Dwight st.....	636	18"	Clay	1,433.60
*Dwight st. to High school...	29	2'- 8"x4'-0"	Brick	4,897.66
	265	2'- 2"x3'-3"	Brick	
	417	2'- 0"x3'-0"	Brick	
At High school, connecting old with new.....	54	24"	Clay	161.88
High school to Elliott street..	305	2'-0" cir.	Brick	469.65
High school to Walnut st....	726	2'- 0"x3'-0"	Con.	6,442.79
	306	2'-2" cir.	Con.	
	1,440	2'-0" cir.	Con.	
connecting new with old.....	54	18"	Clay	
Walnut to Oak st.....	250	18"	Clay	1,678.37
	253	18"	Clay	
	348	12"	Clay	
Federal street, easterly. ....	695	2'-0" cir.	Brick	1,062.40
	130	12"	Clay	212.78
Oak to Buckingham st.....	2,110	18"	Cem.	2,777.24
Hancock to Sherman st.....	1,147	3'- 4"x5'-0"	Brick	13,555.85
Sherman to Chapin st.....	492	3'- 0"x4'-6"	Brick	
Chapin st. to Andrew st....	726	3'- 0"x4'-6"	Brick	
Andrew street to Oak Grove avenue.....	937	2'-10"x4'-3"	Brick	10,793.96
east from Oak Grove ave. to Cortland st.....	548	2'- 4"x3'-0"	Brick	5,042.79
	283	2'- 2"x3'-3"	Brick	
	352	2'- 0"x3'-0"	Brick	
Cortland st., easterly.....	355	24"	Clay	4,586.74
	112	18"	Clay	
	3,399	12"	Clay	
Stearns sq., (west roadway), Bridge street, northerly...	172	12"	Clay	
Stearns sq., (east roadway), Bridge street, northerly...	167	8"	Clay	67.00
Worthington st., southerly...	148	12"	Clay	342.98
Stebbins street, Union street to State st.....	300	12"	Clay	
	293	10"	Clay	
Sterns terrace, Central street, northerly.....	393	12"	Clay	
Stirling street, Eastern avenue to Sheffield st.....	640	12"	Clay	

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
St. James ave., State street, northerly.....	191	18"	Clay	} \$906.01
	467	12"	Clay	
	123	10"	Clay	
Bay st. to Ripley ave.....	91	12"	Cem.	135.23
Florida st. to Ripley ave....	469	12"	Cem.	500.89
Florida st., northerly.....	417	18"	Cem.	} 1,073.90
	300	12"	Cem.	
Clarendon st. to Westminster street.....	248	15"	Cem.	404.60
Clarendon st., northerly.....	138	8"	Clay	64.82
Dartmouth st. to Harvard st.	385	2'- 0"x3'-0"	Brick	2,738.53
Harvard to Princeton st....	528	24"	Clay	1,587.44
Princeton st., northerly.....	308	18"	Clay	} 965.55
	249	15"	Clay	
	57	12"	Clay	
				<hr/> \$8,376.97
Stockbridge st., Main street, easterly.....	777	18"	Cem.	1 084.57
Suffolk st., Wilbraham road, southerly.....	300	15"	Clay	294.06
	300	12"	Clay	} 565.35
	795	10"	Clay	
Sullivan st., Armory street, easterly.....	395	12"	Clay	859.41
†Summer st., Spring to Armory street.....	44	4'- 3"x6'-0"	Brick	} 24,048.88
	*1,344	4'- 2"x6'-3"	Brick	
	*1,093	2'-10"x4'-3'	Brick	
	*750	3'- 8"x5'-6"	Brick	
Summer avenue, Fort Pleasant ave. to Longhill st.....	448	12"	CLay	} 815.24
	358	10"	Clay	
Fort Pleasant ave. to Ran- dolph st.....	673	2'- 0"x3'-0"	Brick	} 7,968.46
Randolph st. to Jackson st...	360	1'-10"x2'-9"	Brick	
Jackson st. to Forest Park ave	360	1'- 8"x2'-6"	Brick	
Forest Park ave. to Green- leaf st.....	367	1'- 6"x2'-3"	Brick	} 2,915.88
Greenleaf st. to Belmont ave.	355	20"	Clay	
	851	18"	Clay	
	736	15"	Clay	
	272	12"	Clay	
	426	10"	Clay	} 37.49
Belmont ave., easterly.....	100	8"	Clay	
*Dickinson st. to White st...	2,219	2'- 8"x4'-0"	Brick	11,531.37
White st., easterly.....	565	2'- 2"x3'-3"	Brick	2,391.46
	207	8"	Clay	60.42
				<hr/> 25,720.32

†Segmental. \*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Co
Sumner terrace, Sumner ave- nue, northerly.....	252	12"	Clay	}
Bay street, Acorn to Bay street.....	220	10"	Clay	
Sycamore street, Acorn to Bay street.....	899	8"	Clay	
Symonds ave., Worthington st. to Bridge st. (includes cost of Bond place).....	300	15"	Cem.	}
Talcott ave., Fisk avenue to Plainfield st.....	362	15"	Clay	
Taylor st., Main to Chestnut st.	316	12"	Clay	
	650	15"	Cem.	
	341	12"	Cem.	
	248	12"	Clay	\$1,347.80
				265.78
Temple st., Maple street to School st.....	304	15"	Clay	}
	300	12"	Clay	
	345	10"	Clay	
outlet into High school sewer	169	15"	Clay	
Tenth street, Garden brook, easterly.....	300	18"	Clay	}
	302	15"	Clay	
	421	12"	Clay	
	4	8"	Clay	
Terrence st., Union to State st.	374	12"	Clay	}
	313	10"	Clay	
	48	10"	Cem.	
Thomas st., Birnie ave., easterly	451	10"	Clay	
Thompson street, Worthington st., southerly.....	603	12"	Cem.	638.27
St James ave. to Bay st.....	703	15"	Cem.	749.22
State to Bay st.....	552	12"	Cem.	653.12
Tracy avenue, Franklin street, southerly.....	14	10"	Clay	15.48
	262	10"	Clay	.....
Trenton street, Dickinson st. to Commonwealth ave.....	146	10"	Clay	}
Tyler st., Oak to Hancock st....	717	15"	Cem.	
	663	12"	Cem.	
Hancock to Eastern ave.....	801	18"	Cem.	
	795	15"	Cem.	
Eastern ave., easterly.....	251	10"	Cem.	139.49
Union st., submerged outlet....	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Main st.....	1,610	3'- 4"x5'0"	Brick	}
	53	2'- 0"x3'-0"	Brick	

\*\*Sanitary sewer.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Main st. to Oak st.....	*718	3'- 2"x4'-9"	Con.	} \$13,447.50
	951	2'-8" cir.	Con.	
	1,021	2'-3" cir.	Con.	
	1,504	2'- 4"x3'-0"	Con.	
Oak to Orleans st.....	404	18"	Cem.	467.96
Hancock to Stebbins st.....	261	2'- 0"x3'-0"	Brick	} 2,307.83
	335	1'-10"x2'-0"	Brick	
Stebbins to Orleans st.....	428	20"	Clay	737.72
Hancock to Eastern ave.....	600	18"	Cem.	} 1,413.45
	800	15"	Cem.	
Eastern ave., easterly.....	248	10"	Clay	152.56
				<b>\$36,967.05</b>
Vassar street, Harvard street, northerly.....	550	12"	Cem.	153.37
Ventura st., Sumner avenue, northerly.....	351	10"	Clay	289.51
Grenada terrace, northerly...	341	10"	Clay	199.50
				<b>489.01</b>
Vermont st., Converse street to Pomona street.....	258	18"	Clay	} 489.33
	267	12"	Clay	
	225	10"	Clay	
Vernon st., Water st., easterly.	639	18"	Cem.	837.92
Main st., westerly.....	216	12"	Cem.	310.68
				<b>1,148.60</b>
Vine st., Main to Fulton st....	697	12"	Cem.	688.75
Vinton st., Liberty to Franklin street.....	357	12"	Clay	357.83
	292	10"	Clay	252.13
				<b>609.76</b>
Walden st., Dickinson street, easterly.....	166	8"	Clay	94.93
Commonwealth to Belmont avenue.....	296	10"	Clay	148.67
				<b>243.60</b>
Walnut st., south from State st., north from Charter ave.....	69	1'- 6"x1'-8"	Brick	85.23
	292	10"	Clay	418.30
Union to Charter ave.....	279	12"	Cem.	492.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'- 0"x3'-0"	Brick	4,956.57
Pine to Oak st.....	272	18"	Cem.	410.04
Hancock to Cedar st.....	784	15"	Cem.	} 1,269.67
Hancock st., southerly.....	180	12"	Cem.	
North from Manhattan st....	249	10"	Clay	212.35
Florence st., northerly.....	53	8"	Cem.	27.12
Hickory to Florence st.....	1,026	12"	Clay	992.67
				<b>9,667.59</b>
Walter st., Birnie ave., to North Main st.....	385	12"	Clay	422.74

\*Elliptical.

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Waltham avenue, Wilbraham road, southerly.....	911	12"	Clay	
Wareham st., Grand avenue, southerly.....	419	10"	Clay	
Warner place, Fort Pleasant ave. to Longhill st.....	508	12"	Clay	} .....
	198	10"	Clay	
	89	10"	Clay	
				\$51.88
Warriener ave., Locust street, easterly.....	448	12"	Clay	
Washburn st., Conn. river to B. & M. R. R.....	1,758	7'-6" chr.	Brick	
Washington boulevard, Longhill st. to Pineywoods ave..	304	2'- 4"x3'-6"	Brick	} 5,032.68
	823	2'- 2"x3'-3"	Brick	
	308	18"	Clay	
	200	15"	Clay	} 868.79
	242	12"	Clay	
	330	10"	Clay	
Wason avenue., Conn. river to Plainfield st.....	451	3'-10"x5'-9"	Brick	} .....
Plainfield st., to Fisk ave....	1,051	3'- 4"x5'-0"	Brick	
Fisk ave. to Birnie ave. ....	634	3'- 2"x4'-9"	Brick	
Birnie ave. to North Main st.	247	2'- 0"x3'-0"	Brick	
Water st., Gardner to Loring st.	474	1'-10"x2'-9"	Brick	1,219.79
Loring st., northerly.....	345	12"	Cem.	237.38
Union to Margaret st.....	721	2'- 0"x3'-0"	Brick	} 2,367.61
Union st., northerly.....	868	18"	Cem.	
Elm to State st.....	275	18"	Cem.	508.75
Elm to Pynchon st.....	43	2'- 0"x3'-0"	Brick	198.00
	498	2'- 6"x3'-8"	Brick	2,949.29
Pynchon st., northerly.....	257	18"	Cem.	404.44
	329	15"	Cem.	460.60
	61	12"	Cem.	85.40
Worthington st., southerly...	209	10"	Clay	333.54
Worthington to Hampden st.	327	15"	Cem.	457.80
Hampden to Railroad street.	321	12"	Clay	638.58
Waverly st., North Main to Chestnut st.....	473	20"	Clay	} .....
	487	10"	Clay	
Weaver Ramble, Rimmon ave., westerly and northerly....	480	12"	Clay	
Webster st., Liberty to Franklin st.....	601	12"	Clay	
Welcome place, Bay street, northerly.....	238	8"	Clay	
Wellesley st., Cornell street, easterly.....	373	12"	Cem.	
Wellington avenue, Wilbraham road, southerly.....	287	15"	Clay	} .....
	244	12"	Clay	
	291	10"	Clay	

## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Wendell ave., Main st., easterly	458	15"	Clay	.....
Westernview st., Forest Park ave., easterly.....	468 138	12" 10"	Clay Clay	} \$539.60
Westford avenue, Wilbraham road, southerly.....	300 300 350	15" 12" 10"	Clay Clay Clay	
*Westford circle to King street.	541	12"	Clay	454.34
Westminster st., Bay to State street.....	300 300 201	15" 12" 10"	Clay Clay Clay	} 705.11
St. James ave., southerly....	773	12"	Cem.	794.10
				1,499.21
White st. Allen to Orange st...	747	24"	Clay	1,717.86
	674 274	20" 18"	Clay Clay	} 1,490.97
Orange st. to Dawson ave...	388	18"	Clay	389.27
	292	15"	Clay	275.73
Gordon st. to Dawson ave...	192	10"	Clay	187.69
Gordon st., southerly.....	690	12"	Clay	671.32
	207	8"	Clay	84.45
Sumner ave. to Lawrence st..	728	24"	Clay	1,061.81
Sumner avenue, southerly...	1,028	20"	Clay	1,719.01
Whitney avenue, Water street, westerly.....	450	12"	Cem.	7,598.11 257.32
Whittier ave., Sumner ave. to Longfellow terrace.....	301 299 301 221	18" 15" 12" 10"	Clay Clay Clay Clay	} 1,261.63
Wilbraham ave., Wilbraham road, southerly.....	1,125	12"	Clay	1,020.78
Alden st. to Beverly st.....	999	10"	Clay	} 1,121.36
	1,180	8"	Clay	
Wilbraham road, State street, easterly.....	248	12"	Cem.	157.79
State st. to Northampton ave.	1,451	2'- 0"x3'0"	Brick	6,198.76
Northampton ave. to Bristol street.....	472 476 478 473	2'- 6"x3'-9" 2'- 4"x3'-6" 2'- 2"x3'-3" 2'- 0"x3'-0"	Brick Brick Brick Brick	} 8,970.16
	254	1'-10"x2'-9"	Brick	
	256	1'- 8"x2'-6"	Brick	
Bristol st., easterly.....	263 405	20" 12"	Clay Clay	
				859.35
				16,186.06

\*Sanitary sewer.



## SEWER SYSTEM—CONTINUED

NAME OF SEWER	Length in Feet	Size	Material	Cost
Wilcox st., Water st., easterly..	548	18"	Cem.	\$1,000.75
	327	12"	Cem.	
Water st., westerly.....	463	12"	Cem.	
Willard avenue, State street, northerly.....	282	18"	Clay	785.36
	300	15"	Clay	
	241	12"	Clay	
Shattuck ave., southerly.....	215	8"	Clay	.....
William st., Water to Main st..	875	12"	Cem.	918.26
	32	12"	Clay	125.28
Main to Dale st.....	351	12"	Clay	906.35
	288	10"	Clay	
Water st., westerly.....	76	18"	Cem.	
	425	12"	Cem.	459.79
Willow st., Cross to State st...	413	12"	Clay	791.42
Cross to Park st.....	265	12"	Clay	378.17
Union to Park st.....	216	18"	Cem.	326.92
Union st. to Hubbard ave...	219	10"	Clay	204.39
Wilmont st., Dickinson street to Revere st.....	349	18"	Clay	
	450	15"	Clay	
	386	12"	Clay	
Winchester street.....	424	12"	Clay	
Windsor st., Knox street, west- erly.....	80	15"	Cem.	
	485	10"	Cem.	
Winthrop st., Main st., east- erly.....	52	18"	Cem.	220.81
	141	15"	Cem.	
	59	18"	Clay	
	461	2'- 0"x3'-0"	Stone	132.30
Wolcott street, Armory street, northerly.....	220	10"	Clay	.....
	104	10"	Clay	119.58
Woodside ter., Belmont ave.. northerly.....	451	10"	Clay	321.97
Forest Park ave., northerly..	307	10"	Clay	.....
Worcester ave., Plainfield to Birdie ave.....	1,486	18"	Cem.	945.80
Worcester st., I. O. Myrtle to Chestnut st.....	4	24"	Clay	
	290	20"	Clay	
	332	2'- 0"x3'-0"	Brick	1,283.00
Chestnut to Holly street....	670	1'-10"x2'-0"	Brick	2,398.09
Oak st., easterly.....	275	12"	Clay	542.93
	212	10"	Clay	
Pine st., easterly.....	546	20"	Clay	768.42

## SEWER SYSTEM—CONCLUDED.

NAME OF SEWER	Length in Feet	Size	Material	Cost
	224	18"	Clay	\$344.66
	349	15"	Clay	510.13
Werthington st., submerged outlet.....	194	24"	Wood	1,883.04
	23	24"	C. Iron	176.25
*Conn. river to Main st.....	1,038	5'- 7"x7'-0"	Brick	33,410.12
*Main to Dwight st.....	821	5'- 4"x7'-0"	Brick	
Dwight to Garden brook.....	566	4'- 0"x6'-0"	Brick	
Garden brook to Spring st....	738	4'-3" cir.	Brick	
Spring st., branch north.....	35	5'-0" cir.	Brick	4,361.35
Spring st., branch south.....	47	2'- 0"x3'-0"	Brick	
Spring street, easterly.....	40	18"	Cem.	614.35
	242	15"	Cem.	
	251	12"	Cem.	
	113	12"	Cem.	
Autumn st., westerly.....	145	10"	Cem.	111.47
near Sacketts ave.....	329	15"	Clay	1,110.54
West brook, easterly.....	217	12"	Clay	
West brook to Autumn st.....	231	15"	Clay	727.56
Sacketts ave., westerly.....	98	12"	Clay	207.28
Sacketts ave. to Kibbe ave....	337	12"	Cem.	335.37
Kibbe ave. to Federal st.....	794	15"	Clay	826.90
Kibbe hollow, westerly to Magazine street.....	167	18"	Clay	381.28
Kibbe Hollow to Bowdoin st. near Magazine to Bowdoin st.	833	2'-2" cir.	Con.	2,357.86
	248	2'- 8"x4'-0"	Brick	20,646.21
	354	2'-1"x3'-1½"	Brick	
	359	3'- 4"x7'-2"	Brick	
	1 307	3'- 4"x6'-9"	Brick	
Bowdoin st. to St. James ave.				
<b>X Court, Dickinson st., westerly and southerly.....</b>	34	10"	Clay	84.24
	192	10"	Clay	.....
<b>Yale st., Dartmouth to Prince- ton street.....</b>	350	24"	Clay	1,770.13
	359	18"	Clay	
	233	15"	Clay	
Princeton st., northerly.....	712	12"	Clay	452.46
<b>York street.....</b>	1,203	7'-0" cir.	Brick	13,912.27
<b>Total.....</b>	<b>627,150</b>			<b>\$1,465 444.75</b>

\*Elliptical.

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## RECAPITULATION BY SIZES

DESCRIPTION	Length in Feet	Size	Material
Segmental	93	6'-0"x4'-3"	Brick and cem
Elliptical shaped	1,038	5'-7"x7'-0"	" "
"	821	5'-4"x7'-0"	" "
"	1,095	4'-10"x7'-3"	" "
"	1,949	4'-8"x7'-0"	" "
"	1,170	4'-6"x6'-9"	" "
"	1,040	4'-4"x6'-6"	" "
"	2,340	4'-2"x6'-3 $\frac{1}{2}$ "	" "
"	1,746	3'-8"x5'-6"	" "
"	830	3'-4"x5'-0"	" "
"	536	3'-2"x4'-9"	" "
"	819	3'-0"x4'-6"	" "
"	1,093	2'-10"x4'-3"	" "
"	2,506	2'-8"x4'-0"	" "
"	5,778	2'-2"x3'-3"	" "
"	417	2'-0"x3'-0"	" "
Egg shaped	566	4'-0"x6'-0"	" "
"	1,131	3'-10"x5'-9"	" "
"	1,074	3'-8"x5'-6"	" "
"	3,512	3'-6"x5'-3"	" "
"	359	3'-4"x7'-2"	" "
"	1,307	3'-4"x6'-9"	" "
"	8,787	3'-4"x5'-0"	" "
"	1,056	3'-2"x4'-9"	" "
"	2,877	3'-0"x4'-6"	" "
"	953	2'-10"x4'-3"	" "
"	364	2'-9"x4'-11 $\frac{1}{2}$ "	" "
"	2,516	2'-8"x4'-0"	" "
"	4,818	2'-6"x3'-9"	" "
"	498	2'-6"x3'-6"	" "
"	150	2'-5"x3'-7 $\frac{1}{2}$ "	" "
"	8,636	2'-4"x3'-6"	" "
"	8,688	2'-2"x3'-3"	" "
"	603	2'-1"x3'-11 $\frac{1}{2}$ "	" "
"	19,338	2'-0"x3'-0"	" "
"	4,921	1'-10"x2'-9"	" "
"	3,132	1'-8"x2'-6"	" "
"	917	1'-6"x2'-3"	" "
"	669	1'-4"x2'-0"	" "
Circular	3,017	7'-0"	" "
"	3,019	6'-6"	" "
"	1,330	6'-0"	" "
"	1,743	5'-9"	" "
"	3,842	5'-6"	" "
"	919	5'-3"	" "
"	2,257	5'-0"	" "
"	3,274	4'-7 $\frac{1}{4}$ "	" "
"	1,762	4'-6"	" "
"	3,362	4'-3"	" "

## RECAPITULATION BY SIZES—CONCLUDED

DESCRIPTION	Length in Feet	Size	Material
Circular.....	952	4'-1"	Brick and cem. mortar.
".....	2,399	4'-0"	" " "
".....	385	3'-9"	" " "
".....	677	3'-6"	" " "
".....	2,209	3'-3"	" " "
".....	2,549	3'-0"	" " "
".....	2,072	2'-8"	" " "
".....	1,520	2'-0"	" " "
".....	190	1'-6"	" " "
Elliptical.....	416	2'-10"x4'- 3"	Brick-concrete.
".....	245	3'- 0"x4'- 6"	" " "
Segmental.....	60	5'- 0"x2'- 1"	Concrete.
Elliptical.....	385	4'-10"x7'- 3"	"
".....	1,085	4'- 2"x6'- 3"	"
".....	718	3'- 2"x4'- 9"	"
".....	612	2'-10"x4'- 5"	"
".....	1,504	2'- 4"x3'- 6"	"
Egg shaped.....	352	2'- 8"x4'- 0"	"
".....	1,365	2'- 6"x3'- 9"	"
".....	191	2'- 4"x3'- 6"	"
".....	648	2'- 2"x3'- 3"	"
".....	1,557	2'- 0"x3'- 0"	"
Circular.....	1,004	4'-9"	"
".....	684	4'-0"	"
".....	1,940	2'-8"	"
".....	1,021	2'-3"	"
".....	1,139	2'-2"	"
".....	1,440	2'-0"	"
".....	26,663	24"	Clay pipe.
".....	20,284	20"	" "
".....	33,198	18"	" "
".....	50,172	15"	" "
".....	106,953	12"	" "
".....	87,332	10"	" "
".....	15,263	8"	" "
".....	287	6"	" "
".....	22,306	18"	Cement pipe.
".....	39,478	15"	" "
".....	61,862	12"	" "
".....	5,079	10"	" "
".....	822	8"	" "
".....	120	24"	Cast-iron pipe..
".....	28	18"	" "
".....	726	24"	Wood pipe.
".....	290	18"	" "
Miscellaneous shapes.....	2,270		Stone brick and mortar
Total.....	627,150		

## GENERAL CLASSIFICATION, 1909

	Feet
Brick and cement mortar.....	137,651
Brick-concrete.....	661
Concrete.....	15,705
Clay pipe.....	340,152
Cement pipe.....	129,547
Cast-iron pipe.....	148
Wood pipe.....	1,016
Miscellaneous materials.....	2,270
Total.....	627,150

## SUMMARY OF SEWERAGE STATISTICS

(In form recommended by Sanitary Section of Boston Society  
Civil Engineers)

*For the Year Ending December 1, 1909*

SPRINGFIELD, MASSACHUSETTS

## GENERAL

Population by census of 1906.....	
Total area of city or town.....	38 square
Area served by sewerage system.....	7.5 square
Collection system, { For sewage only.....	1.14 mile
{ For sewage and surface water....	117.30 mile
{ For surface water only.....	0.52 mile
Method of disposal,--Gravity flow to Connecticut River.	

COLLECTION

MAINS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS)

	For sewage only	For sewage and surface water	For surface water only
1. Lineal feet stone.....		2,460	
2. " " brick.....		137,461	
3. " " concrete.....		15,645	
" " miscellaneous.....		1,825	
4. " " pipe.....	6,034	461,975	2,758
5. " " extended during year.....	3,212	15,253	
6. Number of inverted siphons.....		1	
8. Method of flushing: By connections with the water system and one automatic flush tank.			
9. Method of cleaning: By scrapers and flushing.			
10. Number of automatic flushing tanks.....		1	
11. Number of direct connections with water mains for flushing.....	4	443	
12. Number of flushings of entire system dur- ing year.....		21	
13. Cost of flushing, per mile.....		\$15.29	
14. Cost of cleaning, per mile.....		\$20.50	
17. Number of storm overflows.....		16	
18. Method of ventilation: By man-holes and well holes and through house stacks.....			

HOUSE CONNECTIONS

1. By whom made:	By Sewer Department as far as street line
2. Sizes.....	6" and 8"
3. Number made during year.....	495
4. Lineal feet laid during year.....	About 12,375
7. Average cost per foot, connections made during year.....	\$0.35

## FINANCIAL

## CONSTRUCTION

RECEIPTS		EXPENDITURES	
Balance of previous year..\$	.....	Collection works:—	
Bonds issued.....	9,398.83	(a) Mains.....	\$
Appropriations.....	25,000.00	(b) House connections..	
Entrance fees.....	16,249.87		
House connections.....	6,612.75		
By bills rendered.....	1,682.92		

## MAINTENANCE AND OPERATION

Balance of previous year..\$	.....	Administration.....	\$
		Tools and supplies and materials.....	
Appropriation..	.....	Repairs.....	
		Teams, City Yard and engineering.....	
Assessments.....		Cleaning sewers.....	
Rentals.....		Cleaning catch basins...	
Other sources.....		Flushing sewers.....	
		Work chargeable.....	
		Unclassified expenses....	
		Balance.....	
Total.....	\$58,944.37	Amount paid in interest, 1909.....	\$58,944.37

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\*Paid from Street Department funds.

GENERAL

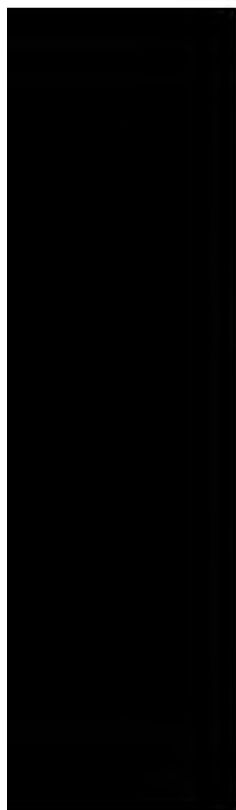
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Total cost of collecting mains to date.....	\$1,473,453.67
Bonded debt at date.....	265,500.00
Value of sinking fund at date.....	38,525.00
Average rate of interest on bonds.....	4%—
Proportion of cost of system paid for by abutters in fees....	25%+
Method of assessing abutters and rate of assessment:—	

Entrance fee of \$25 per tenement on ground floor for dwellings.

For business blocks one story in height, one (1) cent per square foot of area covered by building, and for business blocks two or more stories in height one and three-fourths ( $1\frac{3}{4}$ ) cents per square foot of area covered by the building.







Annual Report  
Superintendent of Streets  
and Sewers

Springfield, Massachusetts



For the Year 1910

*[Handwritten signature]*







FORTY-SECOND ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1910.

*To the City Council:—*

In accordance with the requirements of Chapter 19, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department and descriptions of work done during the fiscal year ending December 1, 1910.

FINANCES IN GENERAL.

REGULAR ACCOUNTS.

RECEIPTS.

Highways and Bridges,	. . . . .	\$262,966 06	
Walks and Curbing,	. . . . .	25,423 71	
Watering Streets,	. . . . .	38,129 53	
Ashes Collection,	. . . . .	42,231 05	
Garbage Collection,	. . . . .	21,931 22	
		<hr/>	\$390,681 57

EXPENDITURES.

Highways and Bridges,	. . . . .	\$261,475 44	
Walks and Curbing,	. . . . .	24,367 44	
Watering Streets,	. . . . .	37,984 27	
Ashes Collection,	. . . . .	42,161 24	
Garbage Collection,	. . . . .	21,251 88	
		<hr/>	\$387,240 27

*Report on Streets.*

## UNEXPENDED BALANCES.

Highways and Bridges, . . . . .	\$1,490 62
Walks and Curbing, . . . . .	1,056 27
Watering Streets, . . . . .	145 26
Ashes Collection, . . . . .	69 81
Garbage Collection, . . . . .	679 34
	<hr/>

## SPECIAL ACCOUNTS.

## NORTH STREET EXTENSION.

Limit of expenditures, . . . . .	\$225,674 37
Expenditures, . . . . .	201,265 33
	<hr/>
Unexpended balance, . . . . .	\$

## PECOUSIC AVENUE. RELOCATION AND IMPROVEMENTS.

Limit of expenditures, . . . . .	\$32,117 00
Expenditures, . . . . .	25,687 52
	<hr/>
Unexpended balance, . . . . .	

## WATER STREET EXTENSION.

Limit of expenditures, . . . . .	\$
Expenditures, . . . . .	\$93,364 47
Transfers, . . . . .	2,780 69
	<hr/>



# WORK IN GENERAL.

Streets, . . .	{	Grading and graveling, . . .	12,805 feet
		Gravel resurfacing, . . .	22,734 feet
		Macadamizing, . . .	28,918 feet
		Macadam resurfacing, . . .	11,939 feet
		Asphalt block paving, . . .	195 feet
		Tar and oil treatments, . . .	52,267 feet
		Bitulithic paving, . . .	1,389 feet
		Bitulithic paving skim coat, . . .	1,248 sq. yards
		Bitulithic paving flush coat, . . .	9,339 sq. yards
		Wood block paving, . . .	1,347 feet
Street cleaning,	{	Gravel, . . .	16.55 miles
		Macadam, . . .	71.29 miles
		Paving, . . .	11.61 miles
Sidewalks, . .	{	Brick (new), . . .	882 feet
		Brick (relaid), . . .	2,387 feet
		Tar concrete (new), . . .	5,004 feet
		Tar concrete (resurfaced), . . .	2,607 feet
Curbing, . . .	{	Set, . . .	11,208 feet
		Reset, . . .	6,789 feet
Crosswalks—new, . . .			47
Streets watered, . . .			93.55 miles
Ashes collected, . . .			29,866 loads
Garbage collected, . . .			1,933 cords

## FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

Appropriation, . . . . .	\$170,000 00
Springfield Street Railway Company,	
Corporation tax, . . . . .	24,514 11
Excise tax, . . . . .	14,214 26
Bills rendered departments and private parties,	33,621 19
Amounts uncollected on pay rolls, . . . . .	16 50
Additional appropriation, . . . . .	20,000 00
Transfer from Water Street Extension, . . . . .	600 00
	<hr/>
	\$26

## EXPENDITURES.

Automobiles, repairs and supplies, . . . . .	\$1,939 83
Bridges, repairs and care, . . . . .	10,476 51
City teams,—horses, harnesses, and wagons,	
uncredited, . . . . .	39 92
City yard, Logan street, . . . . .	51 90
City yard, Summer street, . . . . .	2,563 30
Engineering, . . . . .	513 76
Foremen's winter and holiday pay, . . . . .	915 63
Land damages, . . . . .	256 75
Office and general expenses, . . . . .	3,612 37
Salary of superintendent, . . . . .	3,500 00
Salary of assistant superintendent, part, . . . . .	1,160 50
Street construction, {	Grading and graveling, 10,115 72
	Macadamizing, . . . . . 35,182 46
	Paving, . . . . . 30,693 06
Street maintenance, {	Cleaning, . . . . . 39,539 22
	Cleaning equipment, . . . . . 2,081 81
	General repairs, . . . . . 29,361 27
	Gravel resurfacing, . . . . . 1,761 94
	Macadam resurfacing, . . . . . 14,964 73
	Paving resurfacing, . . . . . 2,182 17
	Winter expense, . . . . . 30,543 85

Tools and supplies, . . . . .	\$1,851 33	
Work and material charged to departments, . . . . .	26,636 70	
Work and material charged to private parties, . . . . .	15,111 63	
	<u>\$265,106 36</u>	
Less material credited, . . . . .	3,630 92	
	<u>\$261,475 44</u>	
Unexpended balance, . . . . .	1,490 62	
	<u>\$262,966 06</u>	

BILLS RECEIVABLE.

Bills receivable November 30, 1909, . . . . .	\$1,450 03	
Bills committed, fiscal year 1910, . . . . .	33,302 34	
	<u>\$30,531 19</u>	\$34,752 37
Bills paid, fiscal year 1910, . . . . .	115 05	
Abatements, . . . . .	<u>30,646 24</u>	
Bills receivable November 30, 1910, . . . . .		\$4,106 13

WALKS AND CURBING.

RECEIPTS.

Appropriation, . . . . .	\$12,000 00	
Bills rendered abutters for work done previous to 1910, . . . . .	3,098 66	
Bills rendered abutters for work done during 1910, . . . . .	6,044 36	
Transfer from Sewers and Drains, . . . . .	2,500 00	
Transfer from Water Street Extension, . . . . .	1,780 69	
	<u>\$25,423 71</u>	

EXPENDITURES.

Crosswalks, new and relaid, . . . . .	\$3,879 94
Curbing, set and reset, . . . . .	4,480 65
Engineering, . . . . .	347 14
Foremen's winter and holiday pay, . . . . .	98 69
Office and general expenses, . . . . .	182 06
Materials on hand, . . . . .	618 93
Salary of assistant superintendent, part, . . . . .	410 67

Sidewalk repairs not chargeable, . . . .	\$1,112 42	
Work and material charged to abutters, . .	10,343 83	
Work and material charged to departments, .	2,122 34	
Work and material charged to the city, . .	966 49	
	<hr/>	\$24,563 16
Tools credited, . . . . .	\$66 26	} 195 72
City teams credited . . . . .	129 46	
	<hr/>	\$24,367 44
Unexpended balance, . . . . .	1,056 27	\$25,423

## BILLS RECEIVABLE.

Bills unpaid November 30, 1909, . . . .	\$2,601 59	
Bills committed, fiscal year 1910, . . .	9,260 70	
	<hr/>	\$11,862 29
Bills paid, fiscal year 1910, . . . . .	\$9,143 02	
Abatements, . . . . .	58 75	
	<hr/>	9,201 77
Bills receivable November 30, 1910, . .		\$2,660 52

## WATERING STREETS.

## RECEIPTS.

Appropriation, . . . . .	\$7,000 00	
Watering streets assessments, . . . . .	28,359 85	
Springfield Street Railway Company, by agreement, . . . . .	2,289 05	
Bills rendered, use of teams and oil sold, .	80 63	
Transfer from Water Street Extension, . .	400 00	
	<hr/>	\$38,129 53

## EXPENDITURES.

General expense, . . . . .	\$362 08
Standpipes and car hydrants, construction, maintenance, opening and closing, . .	1,847 49
Standpipe bases, construction and maintenance,	17 86
Watering carts, storage, painting and repairs,	739 73
Use of teams as per pay rolls, . . . . .	6,608 19
Use of teams as per contract, . . . . .	8,764 16

American Car Sprinkler Company, as per		
contract, . . . . .	\$8,779 93	
Inspector, . . . . .	949 18	
Inspector's horse and carriage, . . . . .	112 94	
Tools and materials, . . . . .	20 32	
Dust laying materials and labor, . . . . .	9,674 58	
City teams, . . . . .	6 68	
Private parties, use of teams and sale of oil, . . . . .	101 13	
	<hr/>	
	\$37,984 27	
Unexpended balance, . . . . .	145 26	
	<hr/>	\$38,129 53

ASHES COLLECTION.

RECEIPTS.

Appropriation, . . . . .	\$41,000 00	
Sundry receipts, . . . . .	431 05	
Transfer from Garbage Collection, . . . . .	800 00	
	<hr/>	\$42,231 05

EXPENDITURES.

Pay rolls, . . . . .	\$38,778 74	
Contract, . . . . .	550 08	
Provender, . . . . .	1,897 80	
Shoeing, veterinary and miscellaneous, . . . . .	470 29	
Wagon, sleigh, and harness repairs, . . . . .	258 54	
Tools, . . . . .	72 77	
Covers, . . . . .	8 00	
General expense and lighting, . . . . .	82 12	
South end barn, repairs, . . . . .	42 90	
	<hr/>	\$42,161 24
Unexpended balance, . . . . .	69 81	
	<hr/>	\$42,231 05

GARBAGE COLLECTION.

RECEIPTS.

Appropriation, . . . . .	\$17,000 00	
Garbage sold, . . . . .	4,798 22	
Sundry receipts, . . . . .	133 00	
	<hr/>	\$21,931 22

## EXPENDITURES.

Pay rolls, . . . . .	\$16,403 08	
Provender, . . . . .	2,920 65	
Shoeing, veterinary and miscellaneous, . . . . .	339 07	
Barn repairs, . . . . .	235 89	
Wagon, sleigh and harness repairs, . . . . .	205 73	
Tools and supplies, . . . . .	142 73	
Covers, . . . . .	18 00	
Telephone and lighting, . . . . .	37 88	
General expense, . . . . .	148 85	
	<hr/>	
	\$20,451 88	
Transfer Ashes Collection, . . . . .	800 00	
	<hr/>	
	\$21,251 88	
Unexpended balance, . . . . .	679 34	
	<hr/>	\$21,931 22

## NORTH STREET EXTENSION.

Limit of expenditure, previously reported, . . . . . \$225,671

## EXPENDITURES.

Previously reported, . . . . .	\$52,164 15	
Land, buildings, etc., . . . . .	144,870 91	
Macadamizing—incomplete, . . . . .	4,230 27	
	<hr/>	
	\$201,265 33	
Unexpended balance, . . . . .	24,409 04	
	<hr/>	\$225,674 37

## PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.

Limit of expenditure, previously reported, . . . . . \$32,117

## EXPENDITURES.

Previously reported, . . . . .	\$23,994 27	
Labor, moving fence and inlet, . . . . .	17 25	
Land taken, . . . . .	1,676 00	
	<hr/>	
	\$25,687 52	
Unexpended balance, . . . . .	6,429 48	
	<hr/>	\$32,117 00

WATER STREET EXTENSION.

Expenditure, previously reported, . . . \$96,145 16

EXPENDITURES.

Reported, . . . . . \$91,612 02

Aug, . . . . . 2 45

Nov, . . . . . 1,750 00

\$93,364 47

Added to other accounts, . . . . . 2,780 69

\$96,145 16

WORK ITEMIZED.

BRIDGES.

REPAIRS AND CARE.

	Description of Work.	Cost.
Overhead cross-		
Street, over B. & A.	Floor and railing repairs,	\$41 61
Road,	Floor repairs,	26 04
Street, Red House		
ing,	Floor repairs,	8 55
I. O.,	New top floor,	395 36
et, I. O.,	Floor repairs,	56 62
, over Conn. River,	Painting and strengthening	
	floor system,	*3,493 20
	New floor, northerly road-	
	way,	1,039 56
et, I. O.,	Floor repairs,	16 04
street,	Floor repairs,	49 13
, over Conn. River,		
N. Y., N. H., & H.		
Road,	Painting,	5,347 40
avenue,	Floor repairs,	3 00
		<u>\$10,476 51</u>

Contains amounts chargeable to the Springfield Street Railway and the Town of West Springfield.

# STREET CONSTRUCTION.

Fiscal year 1910.

GRADING AND GRAVELLING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Boston road, Chicopee road, com- pletion of 1909 work,	Parker street to Wilbraham line,	4,100	6,833	\$0 31	\$2,112 46
Chicopee road, Johnson street, Kensington avenue, Oak street, I. O., Pasadena avenue,	St. James avenue to Carew street, Liberty street northwesterly, Dickinson street to Pasadena avenue, At Parker street,	2,760 1,500 1,915 800 500 1,230	9,200 3,333 6,383 2,666 1,666 4,100	57 15 137 19 13	3,311 69 *1,906 26 972 60 363 33 317 61 531 77
		12,805	34,181		\$10,115 72



Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Berkshire street, I. O., completion, Court street, Crystal avenue, Cumberland street, Dickinson street, Fairfield street, Firglade avenue, Fort Pleasant ave., Greenleaf street, Hancock street, com- pletion, Harriet street, Keith street, Litchfield street, *Longmeadow street, North street, **North street Ex- tension,	Oak to Chestnut street, Water street easterly,  North to Chestnut street, Marengo Park to Sumner avenue,  East side,  Florence to Clark street,  Long Hill street to Longmeadow line, Waverly to Cumberland street,  Liberty to Carew street,	1,400 144 930 426 3,074 882 1,049 2,674 740  816 1,107 384 2,930 498 2,243	6,533 480 3,100 1,420 8,540 2,940 3,490 7,252 3,098  2,720 3,690 1,280 7,813 1,660 7,477	\$0 53 61 52 62 49 57 496  50 48 59 48	\$898 14 824 79 1,647 37 872 90 4,422 13 1,814 16 1,699 04 4,148 79 1,537 79  43 25 1,345 80 1,791 12 761 30 794 19

\* This was done at the expense of the Park Department. \*\* This was done under special appropriation.

Street	Length in feet	Area in sq. yds.	Cost per sq. yd.	Total Cost
Cherokee road, com- pletion of 1909				
Parker street to Wilbraham line, Table.	4,100	6,893	\$0.81	\$2,112.48
Parker street to Carew street, St. James avenue to Carew street, Liberty street northwesterly, Dickinson street to Pasadena avenue, Parker street,	2,760 1,600 1,015 800 500 1,340	2,760 1,600 1,015 800 500 1,340	9,383 9,383 9,383 9,383 9,383 9,383	12,803 14,181 4,100 1,606 2,606 1,606
	15 187 19 19	37		3,911 1,015 1,015 1,015
STREET CONSTRUCTION. Fiscal year 1910. GRADING AND GRAYLING.				

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Berkshire street, I. O., completion, Court street, Crystal avenue, Cumberland street, Dickinson street, Fairfield street, Firglade avenue, Fort Pleasant ave., Greenleaf street, Hancock street, com- pletion, Harriet street, Keith street, Litchfield street, *Longmeadow street, North street, **North street Ex- tension,	Oak to Chestnut street, Water street easterly,  North to Chestnut street, Marengo Park to Sumner avenue,  East side,  Florence to Clark street,  Long Hill street to Longmeadow line, Waverly to Cumberland street,  Liberty to Carew street,	1,400 144 930 426 3,074 882 1,049 2,674 740  816 1,107 384 2,930 498  2,243	6,533 480 3,100 1,420 8,540 2,940 3,490 7,252 3,098  2,720 3,690 1,280 7,813 1,660  7,477	\$0 53 61 52 62 49 57 496  50 48 59 48	\$898 14 824 79 1,647 37 872 90 4,422 13 1,814 16 1,699 04 4,148 79 1,537 79  43 25 1,345 80 1,791 12 761 30 794 19

\* This was done at the expense of the Park Department. \*\* This was done under special appropriation.

## STREET CONSTRUCTION.

Fiscal year 1910.

## GRADING AND GRAVELING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Boston road, Chicopee road, com- pletion of 1909 work,	Parker street to Wilbraham line,	4,100	6,833	\$0 31	\$2,112 46
Chicopee road, Johnson street, Kensington avenue, Oak street, I. O., Pasadena avenue,	St. James avenue to Carew street, Liberty street northwesterly, Dickinson street to Pasadena avenue, At Parker street,	2,760 1,500 1,915 800 500 1,230 12,805	9,200 3,333 6,383 2,666 1,666 4,100 34,181	57 15 137 19 13	3,911 69 *1,906 26 972 60 303 33 317 61 531 77 \$10,115 72

\* Includes cost of grading.

## STREET CONSTRUCTION.

## MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Berkshire street,					\$898 14
I. O., completion,	Oak to Chestnut street,	1,400	6,533		824 79
Court street	Water street easterly,	144	480		1,647 87
Crystal avenue,		930	3,100	\$0 53	872 90
Cumberland street,	North to Chestnut street,	426	1,420	61	4,422 13
Dickinson street,	Marengo Park to Sumner avenue,	3,074	8,540	52	1,814 16
Fairfield street,		882	2,940	62	1,699 04
Firglade avenue,		1,049	3,490	49	4,148 79
Fort Pleasant ave.,	East side,	2,674	7,252	57	1,537 79
Greenleaf street,		740	3,098	496	
Hancock street, com- pletion,					43 25
Harriet street,	Florence to Clark street,	816	2,720	50	1,345 80
Keith street,		1,107	3,690	48	1,791 12
Litchfield street,		384	1,280	59	761 30
*Longmeadow street,	Long Hill street to Longmeadow line,	2,930	7,813		
North street,	Waverly to Cumberland street,	498	1,660	48	794 19
**North street Ex- tension,	Liberty to Carew street,	2,243	7,477		

\* This was done at the expense of the Park Department. \*\* This was done under special appropriation.

## STREET CONSTRUCTION.

## MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Northampton ave.,	Wilbraham road to Beverly street,	1,229	4,096	\$0 37	\$1,531 76
*Pecousic avenue,	Long Hill street northerly,	1,420	3,313		
White street,	School lot to Longmeadow line,	4,926	10,735	72	7,737 88
Wilbraham avenue,		2,046	6,820	48	3,312 05
		28,918	86,457		\$35,182 46

\* This was done at the expense of the Park Department.

## STREET CONSTRUCTION.

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Bridge street,	Dwight to Chestnut street,	Wood blocks,	122	446 }		*\$1,466 83
Ferry street,	Main street easterly to foot of hill,	Asphalt blocks,	195	712 }		
North Main street,	Balance of 1909 work,	Bitulithic,	1,389	3,597	\$2 75	9,891 30
North Main street,	Bancroft to Calhoun street,	Wood blocks,	839	4,210		9,888 02
State street,	Pleasant to Terrence street,	Wood blocks,	386	1,497		*5,039 25
			2,931	10,462		*4,357 66
						\$30,693 06

\* Incomplete.

# GRAVEL RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Berkshire avenue.	Chestnut street to Red House Crossing,	7,567	35,364	\$0 05	\$1,761 94
	west side,	15,167			
	Chestnut street to State, east side,	22,734	35,364		\$1,761 94



## STREET MAINTENANCE.

Fiscal year 1910.

## MACADAM RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Fort Pleasant ave.,	West side,	2,640	9,386	\$0 21	\$1,979 77
Hancock street,	State to Walnut street,	3,184	10,613	24	2,527 06
Locust street,	East side,	800	1,422	24	342 75
Maple street,	Central street southerly,	800	2,666	35	930 06
Park street,	Willow street easterly,				550 78
St. James avenue,	State to Thompson street,	1,635	4,305	365	1,572 80
Walnut street,	Hickory street northerly (west side),	410	591	45	265 72
Walnut street,	Hancock street southerly,	780	1,010	257	266 16
Wason avenue,		500	2,100	23	483 12
Worthington street, incomplete,	Spring street easterly,	1,190	3,305		69 75
		11,939	35,428		\$8,987 97

## TAR AND OIL TREATMENTS.

Street	Limits	Material	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost
Boston road,	State street to Wilbraham line,	Texas road oil,	17,900	29,833	\$0 01	\$309 75
Pecousie avenue.	South end bridge northerly,	Tar and asphalt,	1,100	3,666	045	166 38
Pecousie avenue.	South end bridge southerly,	Tar surfacing,	1,420	3,313	068	224 63
Springfield street,	Chestnut street northeasterly,	Standard macad- am binder A,	3,858	6,858	148	1,015 37
Springfield street,	Opposite hospital,	Asphaltoilene,	300	533	336	393 82
Springfield street,	Chicopee line southwesterly,	Asphaltoilene,	300	640		
State st., north side,	Almshouse to Berkshire ave.,	Standard macad- am binder A,	1,992	3,984	22	1,178 85
State st., south side,	Almshouse to Warner's,	Standard macad- am binder A,	692	1,384		
State st., south side,	Warner's to Berkshire ave.,	Asphaltoilene	1,300	2,600	11	398 73
Sumner ave., south- erly side,	Fort Pleasant ave. to Forest Park ave., resurfacing,	Tar and asphalt mixture,	1,420	3,155	45	1,432 83
Wilbraham road, southerly side,	Homer to Benton street,	Asphaltoilene,	2,550	4,816	127	610 28
Wilbraham road,	Benton street to Wilbraham					

## STREET MAINTENANCE.

### PAVING RESURFACING.

#### BITULITHIC SKIM COATING.

Street.	Area in sq. yds.	Cost.
Bridge street,	101.1	\$101 10
Chestnut street,	155.1	155 10
Hampden street,	16.5	16 50
Harrison avenue,	29.9	29 90
Hillman street,	134.8	134 80
Maple street,	594.2	594 20
Market street,	8.2	8 20
North Main street,	32.	32 00
State street,	137.	137 00
Walnut street,	15.5	15 50
Worthington street,	24.	24 00
	1,248.3	\$1,248 30

#### BITULITHIC FLUSH COATING.

Street.	Area in sq. yds.	Cost.
Chestnut street,	331.9	\$33 19
Hampden street,	139.5	13 95
Hillman street,	726.5	72 65
Maple street,	1,340.8	134 08
Market street,	740.8	74 08
North Main street,	2,216.8	221 68
State street,	318.6	31 86
Walnut street,	3,076.2	307 62
Worthington street,	447.6	44 76
	9,338.7	\$933 87

# STREET MAINTENANCE.

## GENERAL REPAIRS.

Street.	Contract.	Maintenance.	Paving.	Resurfacing Basins.	Miscellaneous.
Abbe ave.				\$24.92	
Adams st.		\$3.38		48.39	
Athens st.		90.50			\$340.12
Allen st.	\$514.25				
Armory st.	590.60	160.36		25.96	6.12
Ashley st.		112.20		2.98	
Bay rd.	286.57				
Bay st.	92.75	\$2.50		112.74	
Beacon st.	156.37				
Belmont ave.	55.53	72.21	\$18.58	248.91	73
Benton st.	41.70				
Berkshire st. I. C.	265.12	340.00			38.32
Bircham Bend.	78.27				5.20
Bircham ave.		20.19			56.24
Boston rd.	419.12				25.16
Bowdoin st.	27.54	5.81			
Bowles st.	24.33			4.12	
Boylston st.				24.16	
Bridge st.		23.00	51.02		
Bristol st.				55.16	
Buckingham st.	154.78				
Burr st.	20.60				
Cambridge st.	62.46				
Canton st.	231.26	214.19		94.91	
Cass st.		60.02		2.98	
Catharine st.				31.68	
Center st.		13.25		35.36	
Central st.		144.32			
Chatham st.		20.25			
Church st.				52.89	
Church st. I. C.	3.58	63.26	221.32	19.30	
Church st. I. C.	19.44				88
Church st.		31.88			
Church st.	178.00			6.52	
Church st.		38.87			8.53
Church st.				53.72	
Church st.	52.97				
Commercial ave.	58.14			166.82	

STREET MAINTENANCE.

GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscel- laneous.	Total Cost.
Congress st.,		\$34 06				\$34 06
Cornell st.,	\$49 08					49 08
Cortland st.,	60 90	6 00				66 90
Cottage st., I. O.,	65 78				\$4 02	69 75
Cross st.,		32 44				32 44
Court st.,		53 61	\$39 57	\$29 12		122 30
Court Square ave.,			39 72			39 72
Dawes st.,	8 84			26 77		35 61
Dickinson st.,	25 75	11 87		18 78		50 90
Dome st.,	398 79					398 79
Dwight st.,			988 37	39 90	2 25	1,080 52
Eagle st.,		21 91				21 91
Eastern ave.,		73 24		19 45		92 69
Elm st.,		6 75	11 40	13 38		31 53
Emery st.,		32 69		9 83		42 52
Everett st.,		14 93		16 84		31 77
Florence st.,	26 41			10 70		37 11
Fiberloid st., I. O.,	371 42					371 42
Florida st.,	31 72					31 72
Fort Pleasant ave.,	20 28	152 15				172 43
Franklin st.,		42 86		7 76		50 62
Fulton st.,		3 37	7 25	3 48	13 15	27 25
Girard ave.,	42 98					42 98
Governor st.,				170 07		170 07
Hampden st.,		1 09	18 44	20 89		40 42
Hampden st., I. O.,	34 59				1 17	35 76
Hancock st.,	88 38	84 87		132 23		255 48
Harrison ave.,			309 70	12 47		322 17
Hickory st.,		27 75		72 49		100 24
Homer st.,		26 87				26 87
Howard st.,		28 55				28 55
Ingersoll grove,	55 74					55 74
Irvington st.,				69 62		69 62
Johnson st.,	63 75					63 75
Kenwood Park,	76 00					76 00
King st.,	6 34	16 87		13 11		36 32
Lester st.,	8 00			85 05		93 05
Liberty st.,	239 53	677 66	7 37	6 20		930 76

# STREET MAINTENANCE GENERAL REPAIRS.—Co

Street.	Gravel.	Macadam.	Paving.
Locust st.,	\$43 25		
Longhill st.,		\$43 01	
Lyman st.,			\$139 2
Main st.,	5 11	463 22	
Main st., I. O.,	228 96	386 99	
Malden st.,	37 50		
Manhattan st.,	61 59		
Maple st.,		39 45	
Marion st.,	103 22		
Mason st.,	61 71		
Massasoit st.,			
Melrose st.,			
Mill st.,		15 72	
Monmouth st.,	22 07		
Monroe st.,	20 40		
Montrose st.,	60 66		
Mulberry st.,	51 97	10 13	
Myrtle st., I. O.,	71 02		
Newland st.,			
North Main st.,		712 71	171 9
Northampton ave.,	163 09		
Oak st.,		39 75	
Oak st., I. O.,	316 18	85 52	
Oak Grove ave.,	21 03		
Oakland st.,		6 75	
Parker st.,	966 01		
Pasco st., I. O.,	56 87		
Patton st.,		52 59	
Pease st.,	25 03		
Pecansie ave.,		187 09	
Phoenix st.,	42 20		
Pineywoods ave.,	39 82		
Plainfield st.,		51 47	428 8
Plumtree rd.,	36 76		
Pynchon st.,		39 67	
Rapids ave., I. O.,			
Reed st.,		20 25	
Riverview ter.,	33 35	4 33	

## STREET MAINTENANCE.

## GENERAL REPAIRS.—CONTINUED.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscellaneous.	Total Cost.
St. James ave.,	\$256 70	\$27 01		\$18 08		\$301 79
Sanford st.,		30 80	\$8 08			38 88
Sharon st.,		37 42				37 42
Shattuck st.,	24 51			84 18		108 69
Sherman rd.,	92 25					92 25
Sixteen Acre rd.,	214 81					214 81
Spring st.,		88 48				88 48
State st.,		683 40	126 61		\$27 17	837 18
Stockbridge st.,		24 41				24 41
Summer st.,		19 62	9 75	4 43		33 80
Sumner av.,	68 17			127 41	37 50	233 08
*Sundry sts.,	1,056 81	2,835 60	283 88	335 34	163 90	4,675 53
Taylor st.,		33 38		36 07		69 45
Tinkham rd.,	99 28					99 28
Tyler st.,	144 12			21 21		165 33
Union st.,	21 48	238 44		19 77		279 69
Walker st.,				93 30		93 30
Walnut st.,		116 96	339 49	26 48	9 47	492 40
Warwick ave.,		29 99				29 99
Water st.,		332 66		38 64		371 30
West st.,		10 75		65 42		76 17
Westford ave.,	86 58					86 58
White st.,	8 05	48 25		123 39		179 69
Wilbraham ave.,	41 70					41 70
Wilbraham rd.,	1,595 47	133 76		14 80	88 19	1,832 22
William st.,	52 44	10 37		8 83		71 64
Willow st.,		48 71		12 14		60 85
Worcester st., I. O.,	505 70	130 05			6 88	642 63
Worthington st.,		158 52	83 17	81 30	18 76	341 75
	\$11,617 12	\$9,517 60	\$3,765 91	\$3,470 46	\$990 18	\$29,361 27

\* Individual street repairs costing less than \$20.00.

## SIDEWALKS AND CURBING.

Fiscal year, 1910.

## CONSTRUCTION AND RECONSTRUCTION.

By orders of the City Council.

Street	Length in feet.	SIDEWALKS		CURBING Length in feet	Order approved
		Material	Description.		
Avon place,	50	Brick,	New,		May 3, 1910.
Beacon street,	517	Tar concrete,	New,		Nov. 23, 1909.
Beacon street,	7	Tar concrete,	Skim coat,	126	Nov. 23, 1909.
Belmont avenue,	379	Tar concrete,	New,		Nov. 28, 1909.
Bridge street,	105	Brick,	Relaid,		Sept. 20, 1910.
Burr street,	858	Tar concrete,	New,		Sept. 28, 1909.
Burr street,	139	Tar concrete,	Skim coat,	1,005	Sept. 28, 1909.
Dawes street,	171	Tar concrete,	New,		Dec. 21, 1909.
Dawes street,	2,261	Tar concrete,	Skim coat,	2,514	Dec. 21, 1909.
Douglas street,	483	Brick,	Relaid,		July 20, 1909.
Firglade avenue,	285	Tar concrete,	New,		June 15, 1909.
Foster street,		Brownstone curb,		88	May 25, 1910.
Harriet street,	832	Brick,	New,	1,497	Apr. 20, 1910.
Kensington avenue,	2,283	Tar concrete,	New,		July 12, 1910.
King street.	217	Tar concrete.	New.		May 3, 1910.



SIDEWALKS AND CURBING.—CONTINUED.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet. 4"	Order approved.
		Material.	Description.		
No. Main street,	831	Brick,	Relaid,		Sept. 20, 1910.
Park street,	373	Brick,	Relaid,		Nov. 23, 1909.
Vermont street,	294	Tar concrete,	New,		May 24, 1910.
Warner place,	271	Brick,	Relaid,		Sept. 28, 1909.
Willow street,	149	Brick,	Relaid,	306	Nov. 23, 1909.
Wolcott street,				4,044	June 15, 1909.
				2,556	

**SIDEWALKS AND CURBING.****CONSTRUCTION BY ORDERS OF ABUTTERS.**

Street.	Length in feet.	SIDEWALKS.		CUF Length 4"
		Material.	Description.	
Arch street, Ashley street, corner Walnut,				79
Beaumont street,				50
Clinton street,				25
Colton street,	63	Tar concrete,	Skim coat,	67
Cumberland street,				
Dawes street,	115	Tar concrete,	Skim coat,	
Ferry street,	175	Brick,	Relaid,	110
Franklin street,				69
King street,				30
Ledyard street.				90
Massasoit street,				713
North street,				
Pineywoods avenue,				259
*State street,				
White street,	22	Tar concrete,	Skim coat,	529
Wilmont street,				42
				2,063

\* Curbing furnished by abutter.

**STREETS MADE PUBLIC.**

BY ORDERS OF THE CITY COUNCIL.

Name.	Limits.	Length in feet.	Width in feet.
Beaumont street,	Sumner avenue to Belmont avenue,	374	50
By road,	Springfield to Armory street,	1,355	60
Kenwood terrace,	Sumner avenue to Belmont avenue,	523	80
Laurel avenue,	Plainfield street to top of bank of Connecticut River,	896	50
Lester street,	Sumner avenue to Vermont street,	685	50
Massasoit street,	Near Montmorenci street northerly,	32	50
Massasoit street,	Chapin terrace to Pratt street,	460	50
North street,	Waverly to Harriet street,	275	50
Ozark street,	Orange street to Grand street,	554	50
Pratt street,	Chestnut to Massasoit street,	588	50
Ranney street,	Orange to Alderman street,	1,426	50
Sumner terrace,	Sumner avenue northerly,	474	80
Warwick street,	Extension easterly to Armory street,	398	40
Wellington street,	Wilbraham road to Marlborough street,	813	48
	1.667 miles,	8,803	

**STREETS RELOCATED AND WIDENE****BY ORDERS OF THE CITY COUNCIL.**

Name.	Limits.	Length in feet.
Bay Road,	Near Oak Grove Cemetery to Berkshire avenue,	1,666
Bridge and Chest- nut streets,	Southerly corner,	18
Chestnut street,	Ferry street southerly,	80
Dickinson and	Easterly corner,	35
Wilmont streets,	Gardner street southerly,	134
Pecousic avenue,		1,933
		<b>1,933</b>

# INVENTORY.

## STREET AND SEWER DEPARTMENTS.

### Lands.

City yard, Logan street, . . . . .	\$8,500 00
City yard, Summer street, . . . . .	30,000 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Boston road, . . . . .	75 00
Gravel bank, Island pond, . . . . .	350 00
Trap rock quarry, Westfield, . . . . .	250 00

### Buildings and structures.

Barn, wagon house, and shed, . . . . .	16,040 00
Scales, . . . . .	318 00
Trap rock bins and trestle, . . . . .	9,000 00
Engine, engine house, trap rock crusher and tools, . . . . .	500 00
Steam roller house, . . . . .	800 00

### Horses, wagons, etc.

Three automobiles, . . . . .	2,800 00
Fourteen horses, . . . . .	2,100 00
Two mules, . . . . .	300 00
Harness, blankets, etc., . . . . .	345 60
Fifteen wagons and carts, . . . . .	1,762 00
Eleven sleighs, sleds, etc., . . . . .	485 00
Provender, . . . . .	264 00

### Special tools and machines.

Horse rollers, . . . . .	235 00
Six steam rollers, . . . . .	8,300 00
Concrete mixer, . . . . .	1,000 00
Hoisting engine, . . . . .	600 00
Macadam scraper, . . . . .	100 00
Road machines, . . . . .	170 00
Sanding machine, . . . . .	100 00
Scarifier, . . . . .	450 00
Sewer pumps and portable boiler, . . . . .	146 00
Street sweepers and cleaning equipment, . . . . .	1,634 74
Eight wheel scrapers, . . . . .	150 00

### Street and sewer materials.

Castings and patterns, . . . . .	523 03
Cement, . . . . .	51 97
Coal, oil, tanks, etc., . . . . .	111 04
Lumber, . . . . .	2,285 50

Sand and sand tickets.	. . . . .
Trap rock,	. . . . .
Paving brick and wood blocks.	. . . . .
Vitrified clay pipe,	. . . . .
Street watering equipment.	
Twenty-four wagons and six old gear	
Tools and supplies, miscellaneous.	
Lanterns, globes, etc.,	. . . . .
Machine shop tools and stock,	. . . . .
Sidewalk materials and tools,	. . . . .
Miscellaneous materials and tools,	. . . . .
Office furniture,	. . . . .

## ASHES AND GARBAGE COLLECTION

Land and buildings.	
State street, land and buildings,	. . . . .
South end barn,	. . . . .
Horses, wagons, etc.	
Twenty-three horses,	. . . . .
Twenty-four wagons,	. . . . .
Twenty sleighs,	. . . . .
Harness, blankets, etc.,	. . . . .
Provender,	. . . . .
Tools and supplies.	
Forty ash carriers,	. . . . .
Fifty-three garbage pails,	. . . . .
Twenty wagon covers,	. . . . .
Small tools.	. . . . .

## GENERAL DESCRIPTION

The costs of the work done by the past fiscal year have been itemized the maintenance and construction of watering streets or dust laying, sidewalk repairs, and the collection of ashes

the total expenditures under the several headings, together with expenditures for street construction under special accounts, amount to \$539,787.15.

ORDERS OF THE CITY COUNCIL.

In accordance with the revised ordinances of the City of Springfield, Section 3, Chapter 19, as amended July 28, 1910, the Board of Public Works has been advised of the orders of the City Council, relating to street acceptances and changes of grade and alignment of streets, which have been carried out as follows:—

Bridge street, Dwight to Chestnut, re-establishment of walk grade.

North street, Harriet to Cumberland, laid out and established.

Parker street, at corner of Oak street, Indian Orchard, relaid out.

Pecousic avenue, easterly side, southerly of Gardner street, relaid out.

Court street, westerly to Water street, relaid out.

Chicopee road, formerly Sherman road, St. James avenue to Carew street, laid out and established.

Chicopee road, northerly of Liberty street, relaid out.

Chestnut street, westerly side, Harriet to Cumberland street, curbing relaid out and constructed.

North street, between Carew and Liberty streets, has been laid out and constructed in part. The macadam surface to a width of forty-six feet will be completed during the early part of the ensuing year. Lying midway between Main and Chestnut streets, this will serve to relieve both Main and Chestnut streets of considerable congestion of traffic. Of course, when Dwight street is extended under the railway station and

between Lyman and Liberty streets in line with North street, it will greatly relieve the present congestion of traffic on North street, southerly of Liberty street.

#### MACADAM.

A total of approximately five and one-half miles of macadam streets have been constructed during the year, in addition to about one and one-fourth miles done under special appropriation and at the expense of the Park Department. This is considerably in excess of the amount of similar work done last year. Included in this work are the macadamizing of Fort Pleasant avenue and Longmeadow street as far as the Longmeadow line, and the macadamizing of White street to the Eastmeadow line, both of which improvements should prove very useful to our own citizens and those of distant places.

The easterly side of Fort Pleasant avenue has been macadamized and the other side has been resurfaced. This will provide for the present needs of the south part of the city.

The most important macadam resurfacing work done this year includes: Fort Pleasant avenue, already referred to; State street, easterly of the City Library; St. James street, from State to Thompson street; and Sumner avenue, southerly of Fort Pleasant avenue to Forest Park avenue.

#### TAR AND ASPHALT SURFACING.

Experiments made last year in the use of tar and asphalt for surface construction have in the main proved satisfactory. Similar work has been done this year in Pecousic street, southerly of Long Hill street, and on the southerly side of Sumner avenue, easterly of Fort Pleasant avenue.

I believe there are a number of streets in the city which should be similarly treated during the coming year. This is not expected to serve as a substitute for the



permanent paving, it should prove satisfactory on the heavier trafficked macadam roadways.

Springfield and State streets and Wilbraham road have been treated with a surfacing of asphalt oil.

#### PAVING.

The sum of \$20,755.04 has been expended for paving Ferry street with bitulithic, North Main and State streets with wooden blocks, and Bridge street with wooden and asphalt blocks. The combined areas of these streets, 10,462 square yards, is an amount wholly inadequate for the present needs of the city. In my opinion the growth of the city warrants the annual expenditure of \$100,000 to \$125,000 for paving purposes, for a few years at least, as no proof is required that macadam in the center and on the main thoroughfares of the city is ill adapted to present traffic conditions.

#### BRIDGES.

The painting of the North End and South End bridges over the Connecticut river, begun last year, has been completed.

The strengthening of the North End bridge under the Street Railway tracks, begun last year, has also been completed, and an agreement on file provides that the Springfield Street Railway Company shall pay a part of the cost of this work.

The northerly roadway of the Toll bridge has been replanked.

It is hoped that settlement of the so-called River-Front Improvement Problem, now being considered by the State Board of Railroad Commissioners, may enable the construction of a new and satisfactory bridge in the place of the Toll

bridge in the near future. The age and style of the bridge renders it far from satisfactory.

#### STREET WATERING AND DUST LAYING.

According to orders of the City Council, the department is required to water or lay the dust on ninety-three and a half miles of streets. This work has been done with teams owned by the city, and by cars operated under contract with the American Car Sprinkler Company of Worcester.

The use of oil, in addition to water alone for dust laying, has been continued, a total of thirty-five to forty miles of macadam roadways having been so treated. I believe it is a whole that the use of oils for this purpose is a success. Dust is laid not only during the day, but also at night. It is an impossibility by the use of water applied during the day of eight hours each day. It is admitted that there are objectionable features connected with oil for dust laying, but on the whole the many advantages possessed by it far outweigh the greater weight.

#### STREET CLEANING.

A rubber squeegee and cleaning machine purchased from the Kindling Machinery Company of Milwaukee, Wisconsin, has been used since April 26, 1910, on the smooth paved streets. I believe it has enabled the department to maintain the streets in a cleaner condition than ever before.

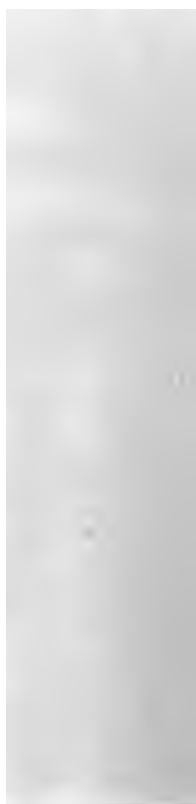
The use of oil for dust laying on the various streets has enabled them to be swept with machine brooms so that they too have been kept in a more sanitary condition than heretofore.

#### ASHES AND GARBAGE COLLECTION.

The recommendation made last year as to the collection of ashes and rubbish, and the suggestion relating to



DARTMOUTH STREET, TEXACO ROAD OIL, 1910.





PINE AND MILL STREETS, TEXACO ROAD OIL, 1910.







JEFFERSON AVENUE, STANDARD EMULSIFYING OIL, 1910.





posal of garbage, whereby certain changes from present methods can probably be made to advantage, are hereby renewed. The rapid growth of the city is reflected in the increased quantity of ashes and rubbish collected during the year, and also in the increased cost of the service. A saving to the city of approximately \$1,000 during twelve months has been effected by contracting for the care of the West street and South end dumps. This has been made possible by the salvage of wastes which are hauled to these places.

#### STREET RAILWAY WORK.

The Springfield Street Railway Company has substituted grooved rails weighing one hundred twenty-five pounds to the yard for tee and lighter grooved rails, in North Main and State streets, where wooden block paving was laid. This substitution was made at the request of the Supervisors of Highways and Bridges.

The Railway Company has extended the St. James avenue tracks northeasterly, across the bridge of the Midland division, New York, New Haven and Hartford Railroad, as far as the bridge over the Boston and Albany Railroad.

A turnout has been built in Wilbraham road between Homer and College streets, under franchise granted by the Board of Aldermen.

A turnout on Longmeadow street, near Pecousic station, was moved westerly, thereby improving the alignment of that street. This was done by the consent of the Board of Park Commissioners, which has jurisdiction over this thoroughfare.

A new track has been laid on the south side of Hickory street, connecting the Midland division, New York, New Haven and Hartford Railroad, with the works of the United States Government at the Watershops.

## RATES OF WAGES.

By orders of the City Council, approved November 22, 1910, the wages of employes of both the street and sewer departments were changed from a minimum of \$1.50 per day, as established December 11, 1906, to a minimum of \$2.25 per day, depending upon the nature of the work, as follows:—

For laborers in the employ of the Street Department engaged in street cleaning and ashes and garbage work, a minimum of \$2.10 per day.

For all other laborers in the Street Department and laborers in the Sewer Department, a minimum of \$2.25 per day.

## ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of Mr. A. H. Woodward, Assistant Superintendent of the Street Department, and to thank the foremen and men by whose efforts the work has been attained by the department during the year is measured.

I thank Mayor Edward H. Lathrop, Alderman C. H. Chamberlain and Councilman Edward T. Broadhurst, members of the Board of Supervisors of Highways and Streets, for the many courtesies which they have extended.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Streets.*

BOARD OF ALDERMEN, December 28, 1910.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 28, 1910.

Read and concurred.

GEO. J. CLARK, *Clerk.*

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Presented to the Mayor, for approval, December 29, 1910.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1910.

Approved.

EDWARD H. LATHROP, *Mayor.*

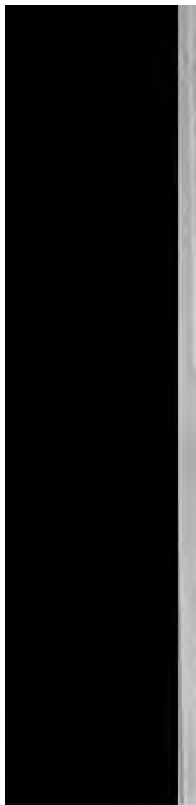


TABLE OF MACADAMIZED STREETS.

\*Ordinance Macadamized with 24 Spots Street Lys. Co.  
 \*\*Macadamized with 24 Spots Street Lys. Co.  
 †Macadamized with 24 Spots Street Lys. Co.

NAME OF STREET.	Location.	Ordinance Lys. Co.	Macadamized Lys. Co.
Abbe ave. bridge app.		274	2,800
Acushnet avenue.		1,000	2,800
Adams street.		1,000	2,800
†Agawam street.	Peruville avenue to South st.	200	200
Allen street.		2,770	20,000
Alexander street.		110	1,000
Allen street.	Mill street to N. E. R. R.	1,000	4,000
Albendale street.		100	2,000
Amherst street.	Harvard to Mount Vernon.	1,200	4,000
Andrew street.	State to Dover.	1,200	4,000
Arbor street.		400	1,200
Arch street.	Main street westerly.	110	1,000
Armory street.	Federal st. to Warwick ave.	2,000	2,000
Armory street.	Liberty to Carver.	1,000	2,000
Ashley street.		1,200	4,000
Auburn street.		700	1,000
Autumn street.		100	200
Arvon place.		100	2,000
†Arvon place.		100	200
Bancroft street.		1,400	4,000
Banks place.		200	200
Bay street.	St. James ave. to Cambridge street.	4,000	14,000
Beaumont street.	Dickinson st. to Belmont ave.	100	2,000
Beech street.		200	1,200
Beechwood street.	Sumner ave. to Spruceland st.	200	1,000
Belmont avenue.	Woodside ave. to Oakland st.	2,000	2,000
†Belmont avenue.	Oakland st. to Sumner ave., easterly side.		1,000
Belmont avenue.	Sumner avenue to White st.		2,000
Belmont avenue.	South side, Garfield street to Sumner avenue.	1,000	4,100
Berkshire street.	State to Oak, I. O.		21,000

TABLE OF MACADAMIZED STREETS.—*Continued.*

NAME OF STREETS.	Limits.	Length in feet
Berkshire street.	Oak to Chestnut, I. O.,	1,400
Birnie avenue.	Greenwich st. to Wason ave.,	3,369
Bliss street,	Main street to N. Y., N. H. & H. R. R.,	1,229
Bond street,		1,629
Bowdoin street.	St. James avenue to Worth- ington street,	1,152
Bowles street,	Bay to McKnight,	750
Boylston street,		1,807
Bradford street,		862
Bridge street,	Water street easterly,	250
Broad street,		959
Brookline avenue,		615
Butler street,		1,525
Byers street,	State to Frost,	480
Carew street,	Main to point near Bartlett,	2,618
Calhoun street,		1,129
Cass street,	Liberty to Butler,	1,762
Catharine street,	Bay to Dartmouth.	150
Cedar street,		1,962
Central street,		4,903
Central street,	Cedar to Mill,	*
Chapin terrace.	Chestnut to Marvin,	601
Charles street,	Liberty to Franklin,	618
Chase avenue,		583
Chestnut street,	State to Worthington, and east side Jefferson avenue to Springfield street,	3,164
Chestnut street,	Allendale to Springfield,	*
Church street,		832
Churchill street,		575
City Hall passageways,		557
Clark street,		619
Clarendon street,	Bay to 200 feet north of Worthington,	1,452
Clinton street,		703

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
College street,		527	1,522
Congress street,		1,550	3,918
Court street,	Water to Court Square ave.,	594	1,980
Cross street,	Willow to Maple,	608	1,416
Crystal avenue,		930	3,100
Cumberland street,	North to Chestnut,	426	1,420
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Demond avenue,		859	2,863
Dickinson street,	Marengo Park to Sumner ave.,	3,074	8,540
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Court street,	Market to Dwight,	369	855
East Hooker street,		679	1,786
Eastern avenue,		4,516	*15,297
Edwards street,		675	2,219
Elliot street,		1,007	3,342
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818	2,089
Elmwood street,		886	2,738
Emery street,		648	2,106
Essex street,		1,606	5,143
Euclid avenue,		1,169	3,896
Everett street,		1,500	4,859
Fairfield street,		882	2,940
Farnsworth street,	Width of 20 feet,	513	1,710
Federal street,	Pearl to Worthington,	353	1,370
Firglade avenue,		1,049	3,490
Fisk avenue,		1,682	6,240
Florence street,	Walnut to Pine,	1,582	5,273
Florida street,	Bay to Worthington,	1,407	4,666
Forest street,		784	2,502
Forest Park avenue,	Sumner avenue to Forest st.,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475

TABLE OF MACADAMIZED STREETS.—CONTINUED

NAME OF STREETS.	Limits.	Length in feet.
Fort Pleasant avenue,	west side,	2,794
Fort Pleasant avenue,	east side,	2,674
Franklin street,	Main to Webster,	3,613
Franklin street,	Webster to Genesee, width of 20 feet,	1,139
Fremont street,		778
Fulton street,	Plainfield to Vine,	2,444
Gardner street,	Water to Main,	1,114
Garfield street,		1,577
Genesee street,	width of 20 feet,	276
George street,	Maple easterly,	110
Grace street,		354
Grant street,		577
Gray's avenue,		560
Greenleaf street,		740
Greenwich street,	North Main to Becket,	643
Greenwood street,		1,561
Grove street,		612
Grosvenor street,		738
Hall street,		992
Hamburg street,	width of 20 feet,	574
Hancock street,	Clark to State,	3,989
Harriet street,		816
Harvard street,	Yale to Cornell,	1,565
Hawthorn street,		540
Hebron street,		698
Heywood street,	Liberty to Warwick ave.,	250
Hickory street,	Walnut to Sheffield st., and Alden street easterly,	4,710
High street,		2,563
Holyoke street,		776
Homer street,		582
Howard street,	N. Y., N. H. & H. R. R. to Main,	1,277
Hubbard avenue,		568
Huntington street,		643



TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Ingraham avenue,		258	462
James street,		928	2,356
Jefferson avenue,		1,275	6,375
John street,		640	2,136
Keith street,		1,107	3,690
Kenwood park,		721	3,888
Kibbe avenue,		213	710
King street,	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,568	*8,484
Lafayette street,		568	1,865
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,659
Leyfred terrace,		625	2,102
Liberty street,	Main street easterly, and Wolcott to Carew,	3,808	9,620
Liberty street,	Heywood avenue to Chicopee line,		**9,920
Lillian street,		387	989
Linden street,		1,287	5,148
Litchfield street,		384	1,280
Locust street,		793	2,501
Lombard street,		590	1,677
Longhill street,	Sumner ave. to Warner place,	475	2,321
Longhill street,	Sumner ave. to Washington boulevard,	1,741	6,837
†Longmeadow street,	Longhill street to Long- meadow line,	2,930	7,813
Loring street,		707	2,294
Madison avenue,		529	1,657
Magazine street,	Lincoln to Armory,	734	2,434
Magnolia terrace,	Sumner ave. to Spruceland ave.,	585	3,120
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Front to Parker,	5,563	19,691
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George street,	1,565	4,572

TABLE OF MACADAMIZED STREETS.—*COSTS*

NAME OF STREETS.	Limits.	Length in feet
Mapledell street,		972
Maplewood terrace.	south side, Fort Pleasant ave. to Forest Park avenue,	1,301
Maplewood terrace,	north side, Forest Park av. to Riverview terrace,	
Marble street,		1,074
Margaret street,	Water to Main,	842
†Marvin street,	Pratt st. to Chapin terrace,	430
Massasoit street,	Carew to Prospect,	851
Mattoon street,		524
McKnight street,	Sherman to Bowles,	532
Medford street,	N. Main st. to Birnie ave.,	624
Merwin street,		713
Mill street,	Main to Dickinson,	3,250
Monroe street,	Hancock to Eastern avenue,	1,345
Morgan street,		852
Morris street,		1,022
Mountainview street,		682
Mulberry street,	Maple to Ridgewood place,	991
Murray Hill avenue,		600
Myrtle street,		484
North street,	Liberty to Cumberland,	5,729
Northampton avenue,	Wilbraham road to Beverly street,	1,229
North Main street,	Calhoun to Chicopee line,	4,567
Norwood street,		1,117
Oak street,		1,344
Oak street, I. O.,	Berkshire to Water,	1,457
Oak street, I. O.,	Berkshire to Main,	
Oakland street,	Allen to Sumner avenue,	4,153
Olive street,		478
Orleans street,		1,509
Osgood street,		890
Palmer avenue,		991
Park street,	Main to Willow and foot of hill to Maple,	865

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Parkwood street,		450	1,500
Patton street,		1,681	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	Gardner street to Mill River bridge,	1,925	5,775
Pecousic avenue,	Mill River bridge to Main street,	350	972
Pecousic avenue,	Main to Longhill,	3,625	10,663
Pendleton avenue.		2,582	6,545
Pine street,		4,420	14,344
Plainfield street,	B. & M. R. R. bridge to Wa- son avenue,	5,395	14,716
Plainfield street,	Washburn to Wason avenue,		**3,953
Pleasant street		428	1,026
Plymouth street,		479	1,597
Portland street,	N. Main to Birnie avenue,	610	2,033
†Pratt street,	Chestnut to Marvin,	600	2,000
Princeton street,	Bay to St. James avenue,	1,509	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Prospect street	Massasoit to Carew,	817	2,996
Pynchon street,		868	2,810
Quincy street,	Oak to Eastern avenue,	2,704	7,780
Randolph street,	Sumner ave. to Forest Park avenue,	916	3,053
Reed street,		660	2,493
Ringgold street,		730	2,432
Rowland avenue,	Plainfield street to Abbe ave. bridge approach,	690	1,674
Rutland avenue,		277	926
Rutledge avenue,		516	1,599
Salem street	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,278
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895

## MACADAMIZED STREETS.—CONTINUED.

NAME OF STREET.	ROUTE.	Length in feet.
State to Congress	Rivers avenue to N. Main.	651
State to Congress	State to Clarendon.	1,623
State to Congress	Agawam street to Mill river.	1,863
State to Congress		2,373
State to Congress	Chicopee line southwesterly.	3,700
State to Congress	Chestnut street northeasterly.	400
State to Congress	Chestnut to dingle, and Ham- burg street to Chicopee line.	
State to Congress		699
State to Congress		1,370
State to Congress	Water at easterly, City Li- brary to Federal Terrence to Sherman, and Highland to N. Y., N. H. & H. R. R. to Berkshire street.	17,220
State to Congress	East of park.	259
State to Congress	State to Quincy.	973
State to Congress	State to Highland division N. Y., N. H. & H. R. R.	3,470
State to Congress	State to end of track.	
State to Congress		635
State to Congress	State to Armory.	378
State to Congress	Highill street to Forest entrance.	3,215
State to Congress	High entrance to Lenox street southerly side.	1,751
State to Congress	Lenox st. to east line Dick- son street.	484
State to Congress	Highill to White.	
		413
		953
		1,577
		714
		583
		2,093

TABLE OF MACADAMIZED STREETS. - Continued.

NAME OF STREET.	Limits.	Length in feet.	Amount expended.
Tular street.	Clark to Hinwood.	1,846	4,000
Union street.	N. Y., N. H. & H. R. R. to ft. of hill, Maple to School, and Mulberry to Eastern ave.,	6,500	21,000
Vernon street.		828	1,000
Vine street.		748	1,800
Vinton street.		672	2,400
Walnut street.	Mill to Hinwood.	1,407	2,800
Walsham avenue.		900	2,600
Warner place.		600	2,100
Warren avenue.		1,200	1,800
Warwick street.	Hollywood street easterly.	877	2,700
Washington road.	Summer avenue to Maplewood terrace.	408	948
Wason avenue.	R. & M. R. R. to N. Main st.,	500	1,500
Wason avenue.	R. & M. R. R. to N. Main st.,		2,400
Water street.		8,148	18,500
Waverly street.		800	2,100
Webster street.		600	2,000
West street.		1,100	8,200
Westminster street.		1,011	6,800
White street.	Allen to Longmeadow line.	8,000	19,400
White street.	Orange to Summer avenue, and Belmont avenue to Longmeadow line.		23,554
Wight place.		300	800
Wilbraham avenue.		2,040	6,800
Wilbraham road.	State to Homer,	2,350	11,100
Wilbraham road.	southerly side, Homer to Benton,	2,800	3,112
Wilbraham road.	Westford avenue to point 660 ft. east of Benton street,		23,800
Wilcox street.	Main to 385 ft. westerly from Water,	1,307	4,000
William street.	N. Y., N. H. & H. R. R. to Main,	1,300	4,300

TABLE OF MACADAMIZED STREETS.—CONTINUED

NAME OF STREETS.	Limits.	Length in feet.
Willow street,	Union to State,	891
Winthrop street,		651
Woodside terrace,	Belmont ave. to Forest Park ave.,	465
Woodside terrace,	Belmont avenue easterly,	475
Worcester street, I. O.,	Pine to Fiberloid Co.'s drive- way, 18 ft. in width,	4,995
Worthington street,	Spring street easterly,	1,255
Worthington street,	Sackett's pl. to Federal st.,	1,125
Worthington street,	Armory st. to St. James ave.,	2,515
Yale street,	Dartmouth to Monmouth,	1,495
York street,		1,005
Total,	70.772 miles.	373,675

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Barnes street, Belmont avenue, Belmont avenue, Birnie avenue, Bridge street, Bridge street,	Hall street westerly, Hall to Oakland, Hooker street northerly, Main to Dwight, Dwight to Chestnut,	Bitulithic, Catakill blocks, Metropolitan blocks, Johnsouburg blocks, Rock asphalt, Creo-resinate wood bl'ks, 3" x 3½" x 8", Asphalt blocks, 5" x 12" x 8",	178 1,862 1,028 145 688 122	552 1,211 914 488 2,525 446	1909 1901 1908 1906 1900 1910
Bridge street, Bridge street, Catharine street, Charles street, Chestnut street, Chestnut street, Chestnut street, Chestnut street,	Main street, 49½ feet westerly. Water street to Old Toll bridge, State to Bay, Liberty to land of B. & A. R. R., Worthington to Lyman, Lyman to B. & A. R. R., B. & A. R. R. to Linden, Linden to Everett,	Bitulithic, Granite blocks, Syracuse brick, Granite blocks, Granite blocks, Granite blocks, Granite blocks, Creo-resinate wood bl'ks, 8" x 8½" x 6" to 10", Granite blocks, Syracuse brick, Bitulithic,	493 249 1,722 150 472 256 1,640 419	1,746 713 5,691 376 1,678 1,471 5,285 1,488	1905 1907 1900 1903 1895 1889 1892 1909
Chestnut street, Chestnut street, Chestnut street,	Everett to Carew, Carew to Allendale, Allendale to Jefferson avenue,	Granite blocks, Syracuse brick, Bitulithic,	354 1,015 825	718 3,432 2,898	1893 1900 1905

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Court street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	317	1,149	1897
		{ Syracuse brick,	—	174	1897
		{ Rock asphalt,	—	128	1907
		{ Syracuse brick,	193	503	1897
		{ Granite blocks,	—	330	1897
		{ Granite blocks,	459	1,700	1904
		{ Granite blocks,	216	848	1905
		{ Syracuse brick,	2,324	9,905	1896
		{ Rock asphalt,	117	297	1900
		{ Rock asphalt,	343	949	1897
		{ Syracuse brick,	—	330	1897
		{ Bitulithic,	1,389	3,597	1910
		{ Granite blocks,	670	1,770	1895
		{ Granite blocks,	1,125	3,006	1906
		{ Bitulithic,	212	821	1904
		{ Bitulithic,	394	1,539	1905
		{ Trinidad asphalt,	546	2,247	1896
		{ Bitulithic,	648	2,025	1906



TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Liberty street,	Chestnut to Cass,	Syracuse brick,	1,399	4,571	1900
Liberty street,	Cass to Heywood avenue,	Syracuse brick,	1,147	3,971	1901
Lyman street,	Main to Chestnut,	Granite blocks,	1,805	4,599	1899
Lyman street,	Chestnut street, easterly,	Granite blocks,	503	2,095	1908
Lyman street,	extension easterly to Spring st.,	Granite blocks,	228	949	1909
Main street,	Locust to Marble,	Syracuse brick,	840	4,381	1897
Main street,	Marble to William,	Syracuse brick,	1,762	8,307	1896
Main street,	William to Bliss,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	1,150	6,460	1906
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	1,899	10,798	1904
Main street,	Worthington to Hampden, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	382	1,188	1904
Main street,	Worthington to Hampden, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	—	962	1903
Main street,	Hampden to Lyman,	Creo-resinate wood bl'ks, 4" x 4" x 8",	153	775	1903
Main street,	Lyman to Liberty,	Creo-resinate grooved wood bl'ks, 4" x 4" x 8",	484	2,780	1903

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street.	Liberty to Sharon, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	458	1,135	1903
Main street.	Liberty to Sharon, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 8" to 10",	—	1,487	1907
Main street,	Sharon to near Franklin and Emery,	Creo-resinate wood bl'ks, 3" x 3½" x 8" to 10",	509	3,108	1907
Main street.	near Franklin, east side,	Syracuse brick,	36	144	1907
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,605	1897
Main street,	Emery to Sargeant, west side,	Catakill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catakill and Metropoli- tan blocks,	—	168	1903
Maple street,	Central to High.	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison avenue,	Bitulithic,	968	1,897	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
North Main street,	Morgan to Bancroft,	Creo-resinate wood bl'ks, 3" x 3½" x 8" to 10",	879	4,544	1909
North Main street,	Bancroft to Calhoun,	Creo-resinate wood bl'ks,	839	4,210	1910

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Railroad street,	Main to Water,	Granite blocks,	516	1,539	1906
Sanford street,	Main to Market,	Rock asphalt,	102	207	1900
State street,	Main street, westerly,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	598	2,357	1909
State street,	Main to Dwight,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	478	2,403	1908
State street,	Dwight to City Library,	Granite blocks,	541	1,631	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	Oak to Stebbins,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	762	3,031	1909
State street,	Pleasant to Terrence,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	386	1,497	1910
State street,	at Walnut,	Syracuse brick,	—	278	1908
State street,	at St. James avenue,	Syracuse brick,	—	183	1907
State street,	Sherman to Highland Div., N. Y., N. H. & H. R. R.,	Bitulithic,	820	4,352	1905
Summer street,	Spring to near Autumn,	Granite blocks,	567	1,512	1907
Summer street,	Autumn to Kibbe avenue,	Granite blocks,	1,259	4,029	1895
Summer street,	Kibbe avenue to point 85' west of Federal,	Granite blocks,	787	2,635	1901

TABLE OF PAVED STREETS.

Material	Limits	Material	Length in feet.	Area in sq. yds.	Year Laid.
Taylor street.	Main to Dwight,	Bitulithic,	770	2,580	1904
Townesley avenue,		Bitulithic,	142	214	1908
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900
Walnut street,	Pendleton ave. to Lebanon st.,	Bitulithic,	1,195	3,888	1905
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,384	1906
White street,	Allen to Orange,	Syracuse brick,	1,610	2,400	1902
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Broadway,	Bitulithic,	404	1,418	1905
Worthington street,	Broadway to Water street,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	299	1,061	1909
Worthington street,	at Sackett place,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	265	886	1908
Worthington street,	Federal to Armory,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	374	1,312	1908

## RECAPITULATION.

Material	Length in feet.	Length in miles.	Area in sq. yds.	Material	Length in feet.	Length in miles.	Area in sq. yds.
Bitulithic,	12,329	2.335	43,531	Metropolitan blocks,	1,023	.194	996
Catskill blocks,	2,809	.532	6,741	Rock asphalt,	1,760	.333	5,630
Creo-resinate wood blocks,	10,768	2.039	52,891	Syracuse brick,	19,534	3.7	77,920
Granite blocks,	11,297	2.140	36,716	Trinidad asphalt,	586	.111	2,247
Johnsonburg blocks,	145	.027	483	Asphalt blocks,	195	.037	712
				Total,	60,446	11.448	227,807



FORTY-SECOND ANNUAL REPORT  
OF THE  
**SEWER DEPARTMENT.**

SPRINGFIELD, MASS., December 28, 1910.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 1, 1910.

**RECEIPTS.**

**SEWERS AND DRAINS.**

Appropriation, . . . . .	\$42,000 00	
Sewer Fees, { Entrances, . . . . .	18,019 53	
{ Building private drains, . . . . .	6,786 60	
Departments and private parties, bills rendered, . . . . .	673 14	
For draining Kibbe Hollow—work done in 1908, . . . . .	495 06	
	<hr/>	\$67,974 33

**EXPENDITURES.**

Automobile, repairs and supplies, . . . . .	\$986 14
Building private drains, . . . . .	5,351 90
City teams, uncredited balance, . . . . .	1,523 83
City yard, . . . . .	1,147 68
Engineering, . . . . .	490 60
Foremen's winter and holiday pay, . . . . .	88 62
	<hr/>
Amount carried forward, . . . . .	\$9,588 77

Amount brought forward,	\$9,588 77
Materials on hand, . . . . .	428 18
Office and general expenses, . . . . .	1,140 78
Refunds on account of fees for sewer en- trances, . . . . .	5 00
Refunds—unexpended balances on deposits for building private drains, . . . . .	463 50
Salary of first assistant superintendent, . . . . .	1,547 15
Sewers, {	Cleaning, . . . . . 2,060 91
	Construction, . . . . . 42,990 55
	Flushing, . . . . . 2,126 44
	Repairs, . . . . . 1,587 84
Supplies, . . . . .	286 91
Tools, . . . . .	700 30
Work and material charged to departments and private parties, . . . . .	641 09
	<hr/> \$63,567 42
Transferred to Walks and Curbing account,	2,500 00
	<hr/> \$66,067 42
Unexpended balance, . . . . .	<hr/> 1,906 91

**BILLS RECEIVABLE.**

Bills receivable, November 30, 1909, . . . . .	\$562 14
Bills committed, fiscal year 1910, . . . . .	25,557 72
	<hr/>
Bills paid, fiscal year 1910, . . . . .	\$25,479 27
Abatements, . . . . .	50 00
	<hr/>

Bills receivable, November 30, 1910,



## SEWER CONSTRUCTION CLASSIFIED.

## VITRIFIED CLAY PIPE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
10"	4,125'	284'	4,409'
12"	5,397'	1,243'	6,640'
15"	2,613'	1,630'	4,243'
18"	2,506'	644'	3,150'
20"	688'	605'	1,293'
24"	1,157'	247'	1,404'
Total,	16,486'	4,653'	21,139'

## CONCRETE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
1'-8"x2'-6" egg shape.....	349'		349'
2'-0"x3'-0" " " .....	145'		145'
2'-2"x3'-3" " " .....	1,110'		1,110'
2'-2"x3'-3" " " .....	121'	233'	354'
2'-10"x4'-3" elliptical.....	1,637'		1,637'
Total.....	3,362'	233'	3,595'

# SEWER CONSTRUCTION AND RECONSTR

## DESCRIPTIONS AND COSTS—FISCAL YEAR 11

LOCATION.	Material.	Length in Feet.	Size.
Adams street, Main to Ashmun street. relaying.....	Clay	294 245 323 221	20" } 18" } 15" } 12" }
Allen street, manholes.....		....	....
Ashmont street, Belmont avenue. northeasterly.....	Clay	250 200	12" } 10" }
Bay street, Cambridge to Sycamore street.....	Clay	332 360	24" } 20" }
Beacon street, manhole.....		....	....
Belmont avenue, Woodlawn to White street.....	Con- crete	1,637	2'-10"x4'-3" } elliptical }
Belmont place, flush gate.....		....	....
Benton avenue, flush gate.....		....	....
Birnie avenue, extension northerly and easterly to North Main street.....	Clay	534 174	24" } 15" }
Blake Hill, Fort Pleasant avenue easterly, incomplete.....	Clay	33	10"
Bloomfield street, extension easterly	Clay	36	15"
Bowles street, Bay street southerly, relaying.....	Clay	64	15"
Bowles street, manholes.....		....	....
Bristol street, extension southerly to Marlborough street.....	Clay	491	12"
Cambridge street, manholes.....		....	....
Cass street, Liberty street northerly, relaying.....	Clay	197	12"

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Central street, manhole.....		....	....	\$21 17
Cherrellyn avenue, extension south- erly.....	Clay	651	12"	574 73
Clayton street, extension westerly...	Clay	100	15"	163 91
Clyde street, Plainfield street west- erly.....	Clay	350 350 271	18" 15" 12" }	1,519 51
College avenue, manholes.....		....	....	67 91
Colton street, manholes.....		....	....	92 36
Concord terrace, Wilbraham road northerly.....	Clay	253	10"	229 05
Court street, manhole.....		....	....	32 93
Demond avenue, manhole.....		....	....	33 49
Dorchester street, flush gate.....		....	....	20 82
Dwight street, Harrison avenue northerly, relaying.....	Clay	129	12"	192 15
Eastern avenue, manholes and flush gates .....		....	....	142 66
Everett street, Cass street easterly, relaying.....	Clay	313	15"	555 74
Farnsworth street, extension north- erly to Chicopee line.....	Clay	279 248 264	18" 12" 10" }	827 14
Firglade avenue, manhole.....		....	....	38 43
Florence street, Hancock street east- erly, relaying.....	Clay	26	10"	81 11
Florence street manhole and flush gate		....	....	52 93

**SEWER CONSTRUCTION AND RECONSTRUCTION.—**

LOCATION.	Material.	Length in Feet.	Size.
Franklin street, manholes.....		....	....
Girard avenue, Bay street southerly, relaying.....	Clay	86	12"
Girard avenue, manholes.....		....	....
Governor street, extension easterly to Penacook avenue, completion	Clay	328 401 402 224	20" 18" 15" 12" }
Greenwood street, North street east- erly, relaying.....	Clay	448 117	12" 10" }
Groveland avenue, flush gate.....		....	....
Hancock street, manhole.....		....	....
High street, manhole.....		....	....
Home street, Penacook avenue east- erly.....	Clay	246	10"
Ionia street, State street northerly..	Clay	720	10"
Kensington avenue, extension easterly to Pasadena street.....	Clay	567 260	12" 10" }
King street, Hancock street to East- ern avenue, relaying, in- complete .....	Clay	311 399 686	20" 18" 15" }
Laurel avenue, manholes.....		....	....
Ledyard street, Armory street north- westerly.....	Clay	478	10"
Lexington avenue, Massasoit street easterly.....	Con- crete	145	2'-0"x3'-0" } egg shape }
Logan street, flush gate.....		....	....

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Lyman street, Chestnut street easterly, relaying, completion.....		....	....	\$224 98
Massachusetts avenue, flush gate....		....	....	23 02
Massasoit street, Carew street northerly .....	Clay	131	10"	113 22
Massasoit street, Lexington avenue southerly .....	Clay	48	10"	108 30
Massasoit street, Montmorenci street to Lexington avenue, rebuilding	Concrete	354	2'-2"x3'-3" } egg shape }	1,451 71
Merrick avenue, King street southerly, relaying .....	Clay	24	12"	29 26
Mill street, Knox to Maple street...	Clay	352	18"	668 24
Newland street, Plainfield street westerly .....	Clay	350 349 251	18" } 15" } 12" }	1,735 99
Northampton avenue, Gunn square to King street .....	Clay	249 202	12" } 10" }	325 24
North Main street, Wason avenue southerly, extension .....	Concrete	349	1'-8"x2'-6" } egg shape }	1,566 32
North Main street, northerly to Chicopee line .....	Clay	106	15"	173 58
Oak street, I. O., completion .....		....	....	77 40
Oak Grove avenue, Bay street southerly .....	Clay	350 350 301	18" } 15" } 12" }	1,089 41
Olive street, manhole .....		....	....	38 41
Orlando street, Sumner avenue southerly .....	Clay	127 240	12" } 10" }	310 17

## SEWER CONSTRUCTION AND RECORD

LOCATION.	Material.	Length.
Oxford street, Riverview terrace northerly.....	Clay	
Ozark street, manhole.....		
Peabody Lane, extension westerly...	Clay	
Penacook avenue, Governor to Home street.....	Clay	
Pendleton avenue, manholes.....		
Quincy street, manholes.....		
Randolph street, flush gate.....		
Ranney street, Kensington avenue northerly.....	Clay	
Rapalus avenue, I. O., Parker street southerly.....	Clay	
Richelieu court, extension southerly	Clay	
Ridgewood place, extension north- erly.....	Clay	
Ridgewood terrace, Union street southerly.....	Clay	
Riverview street, flush gate.....		
Rochelle street, Wilbraham road southerly.....	Clay	
Sharon street, manholes.....		
Smith street, Dorne street westerly..	Clay	
Spring street, manhole.....		
State street, manhole and flush gate		
Suffolk street, flush gate.....		

## SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED.

LOCATION.	Material	Length in Feet.	Size.	Cost.
Sumner avenue, extension easterly to Castle avenue.....	Concrete Clay	1,110 739 250	2'-2"x3'-3" } egg shape } 15" } 12" }	\$2,246 16 1,038 65
Trenton street, flush gate .....		....	....	22 77
Union street, manholes .....		....	....	121 95
Ventura street, flush gate .....		....	....	23 78
Vermont street, flush gate.....		....	....	35 45
Walker street, Water street west- erly.....	Clay	650	12"	688 37
Washington road, Pineywoods avenue northerly, relaying...	Clay	141	10"	149 77
White street, Sumner avenue to Lawrence street, completion..	Clay	538	24"	766 34
Winthrop street, easterly to Dale street, relaying .....	Clay	251 230	15" } 12" }	913 46
Wolcott street, extension northerly	Clay	108	10"	72 91
Worcester avenue, manholes.....		....	....	102 90
X court, flush gate.....		....	....	19 05
		24,734		\$42,990 55

NOTE.—The costs of the above described sewers include the costs of manholes and flush gates.

## SEWERS ABANDONED—1910.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Adams street, Main street to Town brook.....	Cem. Clay	64 86	18" } 18" }	\$322 22
Town brook easterly.....	Brick	890	....	66 68
Bay street, Cambridge street easterly	Clay	247	8"	61 87
Bowles street, Bay street southerly..	Cem.	57	15"	80 24
Cass street, Liberty street northerly	Clay	197	12"	136 08
Dwight street, Harrison avenue north- erly.....	Cem.	100	15"	144 41
Everett street, Cass street easterly		....	....	104 35
Florence street, Hancock street east- erly.....	Cem.	30	10"	32 15
Girard avenue, Bay street southerly	Clay	89	12"	69 74
Greenwood street, Garden brook easterly.....	Clay Cem.	113 452	12" } 12" }	846 81
King street, Hancock street to East- ern avenue.....	Cem.	710 686	18" } 15" }	1,808 75
Massasoit street, Montmorenci street southerly.....	Clay	233	10"	168 93
Merrick avenue, King street south- erly.....	Cem.	26	12"	.....
Sumner avenue, Irvington avenue easterly.....	Clay	207	8"	60 42
Winthrop street, Main street east- erly.....	Stone	461	2'-6"x3'-6"	.....
Washington road, Sumner avenue southerly.....	Clay	140	8"	.....
Worcester avenue, Fisk avenue to Birnie avenue.....	Cem.	632	15"	.....
		5,420		\$3,902 65



**SUMMARY.**

DESCRIPTION.	Length in Feet.	Cost.
Concrete sewers built by regular appropriation.....	3,595	\$13,096 15
Clay pipe sewers built by regular appropriation .....	21,139	27,541 57
Flush gates and manholes built by regular appropriation.....		2,352 83
	24,734	42,990 55
Sewers abandoned.....	5,420	3,902 65
Net addition to sewer system.....	19,314	\$39,087 90

**SEWER CLEANING AND REPAIRS.**

	COS Cleaning.
Acushnet avenue, . . . . .	
Alden street, . . . . .	\$16 00
Alexander street, . . . . .	
Beacon street, . . . . .	
Belmont avenue, . . . . .	
Birnie avenue, . . . . .	71 63
Broad street, . . . . .	
Cass street, . . . . .	
Central street, . . . . .	
Clarendon street, . . . . .	
Cliftwood avenue, . . . . .	13 77
Clinton street, submerged outlet, . . . . .	15 86
College avenue, . . . . .	41 00
Colton street, . . . . .	
Congress street, . . . . .	70 00
Demond avenue, . . . . .	
Eastern avenue, . . . . .	44 75
Elm street, submerged outlet, . . . . .	16 32
Firglade avenue, . . . . .	16 00
Franklin street, . . . . .	29 06
Garden Brook, . . . . .	391 97
Granville street, . . . . .	21 75
Green street, . . . . .	23 00
Greenwich street, . . . . .	16 00
Hampden street, . . . . .	
Hebron street, . . . . .	
Hickory street, . . . . .	23 50
High street, . . . . .	18 00
Howard street, . . . . .	
Hubbard avenue, . . . . .	
Jefferson avenue, . . . . .	12 00
King street, . . . . .	29 99
Lebanon street, . . . . .	69 99

SEWER CLEANING AND REPAIRS—CONTINUED.

	COST OF	
	Cleaning.	Repairs.
Lenox street, . . . . .	\$15 76	\$1 66
Liberty street, . . . . .		2 01
Lowell street, . . . . .	112 51	
Main street, . . . . .	142 77	9 83
Main street, I. O., . . . . .	12 87	39 61
Manhattan street, . . . . .	31 94	
Maple street, . . . . .	32 00	6 01
Margaret street, . . . . .	20 00	
Montmorenci street, . . . . .		16 44
Montrose street, . . . . .	28 00	1 84
Olive street, . . . . .	15 75	
Ozark street, . . . . .	10 75	
Plymouth street, . . . . .		11 13
Rutland avenue, . . . . .		12 70
Sanford street, . . . . .	11 26	
State street, . . . . .	226 06	9 93
St. James avenue, . . . . .		3 32
Sumner avenue, . . . . .	31 49	
Sundry sewers, costing less than \$10, . . . . .	97 95	334 64
Talcott avenue, . . . . .		17 58
Union street, . . . . .	22 15	38 21
Walter street, . . . . .		61 57
Washington Road, . . . . .		32 12
Water street, . . . . .	234 98	
Westminster street, . . . . .	12 97	
Wilbraham road, . . . . .		16 51
Willard avenue, . . . . .	41 35	
Worthington street, . . . . .	1 94	463 80
Worthington street, submerged outlet, . . . . .	17 82	
	\$2,060 91	\$1,587 84

## GENERAL DESCRIPTIONS.

The total expenditures for new sewer construction during the year amounted to \$4 Deducting cost of sewers abandoned, amounting to \$ leaves \$39,087.90 to be added to the value of the sewers as of November 30, 1909.

The total value of our system on November 30, 1909, accordingly \$1,504,532.65 and embraces a total of 15 miles of sewers in the care of this department.

As heretofore, all sewer construction has been done directly by this department, a practice originated many years.

## SEWER FEES.

The receipts from sewer fees, exclusive of the account of building private drains, amounted to \$1 which is considerably in excess of the receipts on this account in any previous year. This reflects the large amount of building construction which has taken place during the year.

## PIPE SEWERS.

The length of pipe sewers built during the year was 21,139 feet, or almost exactly four miles.

As may be seen by reference to the table, this work is distributed throughout the entire city although for a large part in the sections of the city being opened for new street purposes.

## TRUNK SEWERS.

Trunk sewers, of Portland cement concrete, have been built in Belmont avenue, Lexington avenue, Massachussetts North Main street, and Sumner avenue. The total length was 3,595 feet, which was built at a total cost of \$1

It may be interesting to state that the Belmont avenue sewer was built at a cost of \$7,237.33 or \$4,562.67 less than its estimated cost.

#### ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of Mr. Howard O. Buck, Assistant Superintendent of Sewers, and to thank the foremen and men by whose efforts the success attained by the department during the year is largely measured.

I thank Aldermen Nelson L. Elmer, Henry N. Bowman, and William A. Dodge, members of the Committee on Sewers and Drains, for the many courtesies which they have extended to me.

Respectfully submitted,

ARTHUR A. ADAMS,

*Superintendent of Sewers.*

*Report on Sewers.*

BOARD OF ALDERMEN, December 28, 1910.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 28, 1910.

Read and concurred.

GEO. J. CLARK, *Clerk.*

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Presented to the Mayor, for approval, December 29, 1910.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1910.

Approved.

EDWARD H. LATHROP, *Mayor.*

# CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO DECEMBER 1, 1910.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly	301	15"	Clay }	\$497.38
	275	12"	Clay }	
Plainfield st., westerly.....	300	18"	Clay }	1,405.16
	300	15"	Clay }	
	301	12"	Clay }	
	200	10"	Clay }	
				\$1,902.54
**Acorn st., Sycamore to Edgewood st.....	276	10"	Clay	176.64
Acushnet ave., Main street, easterly.....	294	20"	Clay }	298.94
	279	18"	Clay }	
	271	15"	Clay }	
	26	12"	Clay }	
Adams st., Main to Ashmun street.....	294	20"	Clay }	3,267.83
	245	18"	Clay }	
	323	15"	Clay }	
	221	12"	Clay }	
Richelieu st., westerly...	237	12"	Clay	304.12
				3,571.95
Alden st., Hancock to East- ern ave.....	595	18"	Cem. }	1,646.13
	820	15"	Cem. }	
Eastern ave. to Wilbraham ave.....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	Clay	250.86
				2,808.38
Alderman st., Dickinson st. to Scott st.....	296	18"	Clay }	1,148.99
	304	15"	Clay }	
	300	12"	Clay }	
	443	10"	Clay }	
Alexander st., North street, easterly.....	288	10"	Clay	188.48
Alfred st., Birnie ave., easterly	377	10"	Clay	.....
Allen ave., Allen st., easterly	338	10"	Clay	232.73
Allen st., Mill river to Oak- land st.....	216	24"	Clay	576.86
Mill st. to Oakland st.....	365	10"	Clay	447.19
Oakland st. to Plumtree rd..	686	24"	Clay	1,832.06
	383	18"	Clay }	1,701.91
	474	15"	Clay }	
	580	12"	Clay }	
	1,603	12"	Clay }	
	1,401	10"	Clay	950.46
				984.62
Allendale st., North st., east- erly.....	272	12"	Clay }	6,493.10
	340	10"	Clay }	401.43

\*\*Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size	Material.	Cost.
Amaron st., State st., south- erly .....	349	10"	Clay	\$222.90
Amherst st., Harvard street, northerly .....	441	12"	Cem.	\$146.99
Princeton to Monmouth st..	25	10"	Clay	23.78
	512	12"	Clay }	622.90
	191	10"	Clay }	793.67
Andrew st., State st., north- erly .....	463	20"	Clay }	1,809.21
	422	18"	Clay }	
	382	12"	Clay }	
Arbor st., Butler to Carew st.	398	12"	Clay	318.05
Arch st. (see Garden brook)				
Armory Hill Sewer (see pri- vate ways).				
Armory st., Worthington st., southerly.....	570	15"	Cem.	658.06
Summer st., southerly.....	374	12"	Clay	384.78
	325	10"	Clay	193.87
B. & A R. R. to Liberty st.	690	15"	Clay }	1,165.47
	360	12"	Clay }	
	271	10"	Clay }	
Liberty to Sullivan st.....	450	1'-10" x 2'-9"	Brick }	2,439.42
	476	1'-8" x 2'-6"	Brick }	
Sullivan to Carew st.....	156	24"	Clay }	1,006.45
	267	20"	Clay }	
	290	12"	Clay }	
Carew st., northerly.....	452	20"	Clay }	1,209.52
	803	10"	Clay }	
Springfield st., southerly..	31	20"	Clay }	
	146	18"	Clay }	317.00
				7,374.57
Ashley st., Cedar st., easterly	65	18"	Cem.	80.45
	580	15"	Cem. }	1,555.00
	697	12"	Cem. }	
				1,635.45
Ashmont st., Belmont ave., northeasterly .....	250	12"	Clay }	351.57
	200	10"	Clay }	
Atwater Terrace road, Greene lane, westerly....	322	20"	Clay }	655.06
Auburn st., Fulton st., east- erly .....	199	18"	Clay }	
	397	12"	Clay }	
	335	10"	Clay }	334.91
Austin st., State st., northerly	363	10"	Clay	
Autumn st., Summer to Worthington st.....	239	15"	Clay	715.29
Avon place, Maple street, east- erly .....	695	24"	Clay	3,359.45



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Bancroft st.,</b> Garden brook to Chestnut st.....	1,361	3'-4"x5'-0"	Brick	\$8,914.04
including Chestnut st., Ban- croft to Montmorenci st...	379	3'-2"x4'-9"	Brick	
Montmorenci st., Chestnut st., easterly.....	43	3'-2"x4'-9"	Brick	
<b>Bay st.,</b> St. James avenue to Pleasant st.....	250	15"	Clay	\$715.01
	245	12"	Clay	
	228	10"	Clay	
Florida to Pleasant st.....	235	12"	Clay	321.02
Florida to Sherman st.....	304	20"	Clay	1,092.89
	377	18"	Clay	
	812	15"	Clay	
Sherman to Clarendon st...	151	8"	Cem.	46.82
Catharine to Clarendon st...	194	10"	Clay	200.66
Bowles to Cambridge st....	1,037	2'-8"x4'-0"	Brick	8,056.62
	360	2'-2"x3'-3"	Brick	
	332	24"	Clay	
Cambridge to Sycamore st..	360	20"	Clay	1,348.03
				12,726.21
<b>Beacon st.,</b> Eastern ave. to Colton st.....	250	10"	Clay	152.81
Colton st., easterly.....	106	8"	Clay	75.08
				227.89
<b>Beaudry st.,</b> I. O., Main st., southerly.....	300	12"	Clay	745.95
	270	10"	Clay	
	250	12"	Clay	
<b>Beaumont st.,</b> Belmont ave., northerly.....	431	10"	Clay	403.87
Belmont ave. to Sumner ave.....	264	10"	Clay	183.91
<b>Beech st.,</b> Central st., north- erly.....	410	10"	Cem.	587.78
<b>Beechwood ave.,</b> Sumner to Spruceland ave.....	595	12"	Clay	95.58
<b>Belgrade place,</b> Walnut st.. westerly.....	220	8"	Clay	19.09
	140	6"	Clay	
	300	18"	Clay	
<b>Bellevue ave.,</b> Belmont ave., easterly.....	300	15"	Clay	....
	194	12"	Clay	
	744	10"	Clay	
<b>Dickinson st.,</b> westerly....				....
<b>Belmont ave.,</b> Fort Pleasant ave., easterly.....	90	10"	Clay	93.92
Mill river to Woodside ter.	954	20"	Clay	2,698.67
Woodside ter. to Litchfield	660	2'-0"x3'-0"	Brick	11,750.19
	445	1'-10"x2'-9"	Brick	
	593	1'-8"x2'-6"	Brick	
	550	1'-6"x2'-3"	Brick	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Litchfield street to Kenwood	432	20"	Clay	\$1,451.53
Park .....	493	18"	Clay	
Kenwood Park to Sumner ave	301	15"	Clay	
	403	12"	Clay	871.69
	616	10"	Clay	
*Sumner ave. to Wood-	830	3'-4"x-5'-0"	Brick	
lawn st.....	819	3'-0"x-4'-6"	Brick	8,216.97
	245	3'-0"x4'-6"	Brick Con.	
	416	2'-10"x4'-3"	Brick Con.	
*Woodlawn to White st....	1,637	2'-10"x4'-3"	Con.	7,237.33
				\$35,790.71
Belmont Place, Belmont ave.,	216	10"	Clay	159.78
southerly.....				
Benton ave., Benton st.,	300	10"	Clay	360.43
easterly.....	325	8"	Clay	
Benton st., State st., southerly	301	12"	Clay	
	300	10"	Clay	513.96
	247	8"	Clay	
	320	8"	Clay	
				933.64
Berendo ave., Grenada ter.	345	12"	Clay	282.67
to Alderman st.....				
Berkeley st., Princeton to	483	12"	Clay	517.22
Monmouth st.....				
Berkshire st., I. O.....	701	12"	Cem.	946.21
Oak to Myrtle st.....				
Oak st., easterly.....	387	12"	Clay	389.89
Chestnut st. to Myrtle st ...	577	12"	Clay	545.74
Besse place, Main st., west-	290	10"	Clay	1,881.84
erly .....				
Birnie avenue, Wason ave-	896	24"	Clay	1,534.02
nue, northerly and easterly				
to North Main st.....	174	15"	Clay	1,024.75
Wason ave., southerly.....	350	18"	Clay	
	417	15"	Clay	
Worcester street extension,	162	15"	Cem.	....
northerly to Grace st. . . .				
Worcester street extension,	144	12"	Cem.	....
southerly to Walter st. . .				
Douglas st., northerly.....	292	24"	Clay	1,149.93
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker	373	1'-10"x2'-9"	Brick	1,319.73
st.....	312	20"	Clay	768.74
	316	18"	Clay	
	168	15"	Clay	
Arch to Hooker st.....	1,048	24"	Clay	158.56
				5,955.73

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Blake Hill, Fort Pleasant ave., easterly.....	33	10"	Clay	\$18.34
Bliss st., from Main to N. Y. N. H. & H. R. R'.....	1,284	12"	Cem.	1,190.68
Bloomfield st., Oakland st., easterly.....	500 397	18" 15"	Clay } Clay }	1,326.47
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.).....	203	12"	Cem.	....
Bond st., Garden Brook sewer to Chestnut st.....	341 959	2'-0" x 3'-0" 24"	Brick Clay	\$1,580.25 2,261.42
				3,841.67
Bowdoin st., Worthington st., southerly .....	660 285	15" 12"	Cem. Clay	762.11 371.52
Worthington to Ingersoll gr...	819	12"	Cem.	758.64
				1,892.27
Bowles st., Bay to McKnight	695	15"	Cem.	1,083.39
	64	15"	Clay	115.95
Pease st., northerly .....	275	8"	Clay	35.77
				1,235.11
Boylston st., Cypress to Clin- ton street .....	610 346	18" 15"	Cem. } Cem. }	1,638.72
Brace st., Belmont avenue, northerly .....	137	10"	Clay	....
Bradford st., North Main to Fulton st. ....	352 758	15" 12"	Cem. } Cem. }	1,301.99
Bridge st., Main st. to Conn. river .....	798 275	12" 15"	Cem. Clay	718.79 429.14
Main to Chestnut st.....	1,158	2'-0" x 3'-0"	Brick	5,414.20
				6,562.13
Bristol st., Wilbraham road to Marlborough st.....	299 560	15" 12"	Clay } Clay }	599.47
Broad st., Hanover to Main st	970	15"	Cem.	1,401.19
Brookline avenue, North st., easterly .....	328 171	12" 10"	Clay } Clay }	29.57
Brown st., Yale to Bay st....	483 21	10" 8"	Cem. } Cem. }	357.65

*Report on Sewers.*

BOARD OF ALDERMEN, December 28

Read, accepted, ordered printed, and sent down for

E. A. NEWELL

COMMON COUNCIL, December 28

Read and concurred.

GEO. J. CLARK

Presented to the Mayor, for approval, December 29

E. A. NEWELL, Clerk

MAYOR'S OFFICE, SPRINGFIELD, MASS., December  
Approved.

EDWARD H. LATHROP

# CITY OF SPRINGFIELD,

**SEWER SYSTEM TABULATED TO DECEMBER 1, 1910.**

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Abbe ave., Fisk ave., westerly	301	15"	Clay	\$497.38
	275	12"	Clay	
Plainfield st., westerly.....	300	18"	Clay	1,405.16
	300	15"	Clay	
	301	12"	Clay	
	200	10"	Clay	
				<hr/> \$1,902.54
**Acorn st., Sycamore to Edgewood st.....	276	10"	Clay	176.64
Acushnet ave., Main street, easterly.....	294	20"	Clay	298.94
	279	18"	Clay	
	271	15"	Clay	
	26	12"	Clay	
Adams st., Main to Ashmun street.....	294	20"	Clay	3,267.83
	245	18"	Clay	
	323	15"	Clay	
	221	12"	Clay	
Richelieu st., westerly..	237	12"	Clay	304.12
				<hr/> 3,571.95
Alden st., Hancock to East- ern ave.....	595	18"	Cem.	1,646.13
	820	15"	Cem.	
Eastern ave. to Wilbraham ave.....	895	15"	Clay	911.39
Wilbraham ave. to Hickory st.	499	10"	Clay	250.86
				<hr/> 2,808.38
Alderman st., Dickinson st. to Scott st.....	296	18"	Clay	1,148.99
	304	15"	Clay	
	300	12"	Clay	
	443	10"	Clay	
Alexander st., North street, easterly.....	288	10"	Clay	188.48
Alfred st., Birnie ave., easterly	377	10"	Clay	.....
Allen ave., Allen st., easterly	338	10"	Clay	232.73
Allen st., Mill river to Oak- land st.....	216	24"	Clay	576.86
Mill st. to Oakland st.....	365	10"	Clay	447.19
Oakland st. to Plumtree rd..	686	24"	Clay	1,832.06
	383	18"	Clay	1,701.91
	474	15"	Clay	
	580	12"	Clay	
	1,603	12"	Clay	
	1,401	10"	Clay	950.46
				<hr/> 984.62
Allendale st., North st., east- erly.....	272	12"	Clay	6,493.10
	340	10"	Clay	401.43

\*\*Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	(
<b>Amaron st., State st., south- erly</b> .....	349	10"	Clay	
<b>Amherst st., Harvard street, northerly</b> .....	441	12"	Cem.	\$146.9
Princeton to Monmouth st..	25	10"	Clay	23.7
	512	12"	Clay	622.9
	191	10"	Clay	
<b>Andrew st., State st., north- erly</b> .....	463	20"	Clay	
	422	18"	Clay	
	382	12"	Clay	
<b>Arbor st., Butler to Carew st.</b>	398	12"	Clay	
<b>Arch st. (see Garden brook)</b>				
<b>Armory Hill Sewer (see pri- vate ways).</b>				
<b>Armory st., Worthington st., southerly</b> .....	570	15"	Cem.	658.0
Summer st., southerly.....	374	12"	Clay	384.7
	325	10"	Clay	193.8
<b>B. &amp; A R. R. to Liberty st.</b>	690	15"	Clay	1,165.4
	360	12"	Clay	
	271	10"	Clay	
<b>Liberty to Sullivan st.</b> .....	450	1'-10"x2'-9"	Brick	2,439.4
	476	1'-8"x2'-6"	Brick	
<b>Sullivan to Carew st.</b> .....	156	24"	Cray	1,006.4
	267	20"	Clay	
	290	12"	Clay	
<b>Carew st., northerly</b> .....	452	20"	Clay	1,209.5
	803	10"	Clay	
<b>Springfield st., southerly</b> ...	31	20"	Clay	
	146	18"	Clay	317.0
<b>Ashley st., Cedar st., easterly</b>	65	18"	Cem.	80.4
	580	15"	Cem.	
	697	12"	Cem.	
<b>Ashmont st., Belmont ave., northeasterly</b> .....	250	12"	Clay	
	200	10"	Clay	
<b>Atwater Terrace road, Greene lane, westerly</b> ....	322	20"	Clay	
	199	18"	Clay	
<b>Auburn st., Fulton st., east- erly</b> .....	397	12"	Clay	
	335	10"	Clay	
<b>Austin st., State st., northerly</b>	363	10"	Clay	
<b>Autumn st., Summer to Worthington st.</b> .....	239	15"	Clay	
<b>Avon place, Maple street, east- erly</b> .....	695	24"	Clay	



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4"x5'-0"	Brick	\$8,914.04
including Chestnut st., Ban- croft to Montmorenci st....	379	3'-2"x4'-9"	Brick	
Montmorenci st., Chestnut st. easterly.....	43	3'-2"x4'-9"	Brick	
Bay st., St. James avenue to Pleasant st.....	250 245	15" 12"	Clay Clay	\$715.01
	228	10"	Clay	
Florida to Pleasant st.....	235	12"	Clay	321.02
Florida to Sherman st.....	304	20"	Clay	1,092.89
	377	18"	Clay	
	812	15"	Clay	945.16
Sherman to Clarendon st....	151	8"	Cem.	46.82
Catharine to Clarendon st....	194	10"	Clay	200.66
Bowles to Cambridge st.....	1,037	2'-8"x4'-0"	Brick	8,056.62
	360	2'-2"x3'-3"	Brick	
Cambridge to Sycamore st....	332	24"	Clay	1,348.03
	360	20"	Clay	
				12,726.21
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	152.81
Colton st., easterly.....	106	8"	Clay	75.08
				227.89
Beaudry st., I. O., Main st., southerly.....	300 270	12" 10"	Clay Clay	745.95
Beaumont st., Belmont ave., northerly.....	250 431	12" 10"	Clay Clay	
Belmont ave. to Sumner ave.....	264	10"	Clay	183.91
Beech st., Central st., north- erly.....	410	10"	Cem.	587.78
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	95.58
Belgrade place, Walnut st., westerly.....	220 140	8" 6"	Clay Clay	19.09
Bellevue ave., Belmont ave., easterly.....	300 300	18" 15"	Clay Clay	....
	194	12"	Clay	....
Dickinson st., westerly.....	744	10"	Clay	....
Belmont ave., Fort Pleasant ave., easterly.....	90	10"	Clay	93.92
Mill river to Woodside ter.	954	20"	Clay	2,698.67
Woodside ter. to Litchfield	660	2'-0"x3'-0"	Brick	11,750.19
	445	1'-10"x2'-9"	Brick	
	595	1'-8"x2'-6"	Brick	
	550	1'-6"x2'-3"	Brick	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	(
Litchfield street to Kenwood	432	20"	Clay	} \$1,451.5
Park .. . . . . .	493	18"	Clay	
Kenwood Park to Sumner ave	301	15"	Clay	
	403	12"	Clay	
	616	10"	Clay	} 871.6
*Sumner ave. to Wood-	830	3'-4"x-5'-0"	Brick	
lawn st. .... .	819	3'-0"x-4'-6"	Brick	
	245	3'-0"x4'-6"	Brick Con..	
	416	2'-10"x4'-3"	Brick Con.	} 3,470.4
*Woodlawn to White st....	1,637	2'-10"x4'-3"	Con.	
				7,237.8
Belmont Place, Belmont ave.,				
southerly... .. .	216	10"	Clay	
Benton ave., Benton st.,	300	10"	Clay	} 513.96
easterly... .. .	325	8"	Clay	
Benton st., State st., southerly	301	12"	Clay	
	300	10"	Clay	
	247	8"	Clay	} 419.68
	320	8"	Clay	
Berendo ave., Grenada ter.				
to Alderman st.....	345	12"	Clay	
Berkeley st., Princeton to				
Monmouth st.....	483	12"	Clay	
Berkshire st., I. O.....				
Oak to Myrtle st.....	701	12"	Cem.	946.2
Oak st., easterly.....	387	12"	Clay	389.8
Chestnut st. to Myrtle st ...	577	12"	Clay	545.7
Besse place, Main st., west-				
erly ... .. .	290	10"	Clay	
Birnie avenue, Wason ave-				
nue, northerly and easterly	896	24"	Clay	} 1,534.0
to North Main st.....	174	15"	Clay	
Wason ave., southerly.....	350	18"	Clay	} 1,024.7
	417	15"	Clay	
Worcester street extension,				
northerly to Grace st. . .	162	15"	Cem.	...
Worcester street extension,				
southerly to Walter st ..	144	12"	Cem.	...
Douglas st., northerly.....	292	24"	Clay	} 1,149.9
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker	373	1' 10"x2'-9"	Brick	1,319.7
st.....	312	20"	Clay	} 768.7
	316	18"	Clay	
	168	15"	Clay	158.50
Arch to Hooker st.....	1,048	24"	Clay	...

\*Elliptical.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Congress st., Garden brook to Main st. ....	53	12"	Cem.	\$75.46
	319	12"	Clay	705.44
Garden brook to Chestnut st.	133	20"	Clay	1,463.00
	198	18"	Clay	
	369	15"	Clay	
	288	12"	Clay	
	119	15"	Cem.	277.22
	76	10"	Cem.	
				<hr/> \$2,521.12
Continental st., Sumner ave. southerly .....	215	12"	Clay	102.05
	266	10"	Clay	
Converse street, Sumner ave to Vermont st. ....	506	18"	Clay	443.87
Cook's ave., Worthington st. to N. Church ave. ....	117	15"	Cem.	573.84
N. Church avenue, southerly (includes cost of N. Church ave.) .....	69	10"	Cem.	
Cornell st., Darimouth terrace to Wellesley st. ....	185	15"	Clay	543.05
	374	12"	Clay	
Wellesley street., easterly ..	186	10"	Clay	208.20
Princeton st., westerly .....	52	10"	Cem.	47.30
	86	8"	Clay	88.04
Princeton st., easterly .....	181	10"	Cem.	132.12
	120	10"	Clay	180.93
				<hr/> 1,199.64
Cortland street, State street northerly .....	164	15"	Clay	672.01
	621	12"	Clay	
Cottage ave. (see Melrose st.)				
Court st., Water st., easterly.	273	12"	Cem.	259.08
Court Square ave., westerly.	431	12"	Cem.	553.45
Main st. to Court Square ave.	200	12"	Cem.	309.67
				<hr/> 1,122.20
Crosby st. Walnut st. westerly	321	10"	Clay	231.38
Cross st., Main to Willow st.	388	18"	Clay	878.12
Willow st., easterly .....	363	12"	Cem.	311.56
				<hr/> 1,189.68
Crystal ave., Belmont ave., easterly .....	251	15"	Clay	24.07
	250	12"	Clay	
	298	10"	Clay	
*Dickinson st., westerly ....	362	15"	Clay	650.64
	372	12"	Clay	
				<hr/> 674.71
Cumberland st., Chestnut st., westerly .....	167	10"	Clay	125.29
North Main st., easterly ...	205	15"	Clay	300.96
				<hr/> 426.25

\*Surface drainage only.

## SEWER SYSTEM.—

NAME OF SEWER.	Length in Feet.	Size
Bryant st., Belmont ave. to Sumner ave.,.....	274 301 300	15" 12" 10"
Buckingham place, Bay st., westerly.....	235	10"
Buckingham st., Bay to Clar- endon st.....	651	12"
Bay st., southerly .....	35	12"
State to Bay st.....	305	18"
	345	15"
	675	12"
Burr st., Andrew st., easterly	570	12"
Butler st., Chestnut to Cass st.	1,268	20"
Cass st., easterly.....	321	20"
Calhoun st., North Main to North st. ....	853	12"
North st., easterly.....	300	8"
Cambridge street, Bay street, southerly.....	276 331 266 302 278	20" 18" 15" 12" 10"
Card-factory pond (see pri- vate ways).		
*Carew st., Main st. to Gar- den brook (cost shown un- der Clinton st.) .....	250 32 1,456	4'-6"x6" 5'-0" 4'-3"
Garden brook to Prospect st.	1,257 791	3'-0" 2'-8"
Massasoit street, easterly...	580 200	18" 12"
Prospect st. to Armory.....	989 1,365	2'-8" 2'-6"x3
Armory st., easterly.....	1,101 448	10" 8"
Liberty st., easterly.....	502 499 434	15" 12" 10"

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Carlisle st., Wilbraham road, southerly.....	400 246	10" 8"	Clay Clay }	\$355.69
Cass st., Liberty to Franklin st.	500	12"	Clay }	\$575.28
Linden st., southerly.....	163	10"	Clay }	
Linden st., northerly.....	596	15"	Clay }	892.07
	224	12"	Clay }	1,467.35
Catharine st., Dartmouth to McKnight st.....	833	2'-0" x 3'-0"	Brick	4,428.92
State st. to McKnight st..	348	15"	Clay }	1,348.95
	438	12"	Clay }	
	333	10"	Clay }	5,777.87
Cedar st., Pine to Walnut st.	180	3'-10" x 5'-9"	Brick	889.35
	1,074	3'-8" x 5'-6"	Brick	6,206.73
Pine st., westerly.....	378	12"	Cem.	288.32
				7,384.40
Cedar st., I. O., Main st. to river.....	433	2'-0" x 3'-0"	Brick	2,001.44
Main st. to Center st.....	274	12"	Clay	263.92
				2,265.36
Cemetery brook (see private ways).				
Center street, Oak Grove ave., northerly.....	70	10"	Clay	24.73
Center st. I. O., Oak to Pine st.	463	12"	Cem.	510.73
Pine to Cedar st.....	349	12"	Clay }	668.19
	300	10"	Clay }	
Cedar st., easterly.....	400	10"	Clay	341.81
				1,520.73
Central st., Main st., easterly	99	15"	Cem.	147.60
	546	12"	Cem.	385.49
Main to near Maple st.....	527	2'-0" x 3'-0"	Brick }	2,296.25
	700	1'-8" x 2'-6"	Brick }	
near Maple street to Sterns terrace.....	769	18"	Clay	1,211.88
	105	12"	Clay	199.95
Sterns terrace to Cedar st...	334	18"	Cem.	102.50
Pine st., westerly.....	500	12"	Cem.	568.42
Pine to Spruce st.....	339	12"	Cem.	376.00
	335	12"	Clay }	514.05
	310	10"	Clay }	
Spruce to Hancock st.....	861	20"	Clay	1,344.35
Hancock st. to Mill st.....	597	2'-0" x 3'-0"	Brick	2,135.31
Mill st. to Mill river.....	40	24"	Clay	136.83
				9,418.63

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Central st. place, Knox to Central st.....	279 285	10" 12"	Cem. Cem.	\$197.6 44.0
Chapel street, Eastern ave- nue, easterly.....	400	10"	Clay	
Chapin terrace, Chestnut st., easterly.....	327 279	15" 12"	Clay Clay	}
Chase ave. Fort Pleasant ave., easterly.....	238 333	12" 10"	Clay Clay	
Charles st., Liberty to Frank- lin st.....	27 620	12" 12"	Clay Cem.	}
Liberty st., southerly.....	29	12"	Clay	
Charter ave., Walnut street, easterly.....	527	12"	Clay	
Cherrelyn ave., Phoenix st, southerly.....	300 651	15" 12"	Clay Clay	410.62 574.73
Cherry lane, Mill river to Cen- tral street.....	398 434 251 295	18" 15" 12" 10"	Clay Clay Clay Clay	}
Cherryvale ave., Longhill st. to Florentine gardens.	596	10"	Clay	
Chester st., Mill st., northerly	459	12"	Clay	}
	161	10"	Clay	
	112	8"	Clay	
Chestnut st., Edwards street, southerly.....	575	12"	Cem.	579.0
Mattoon st., southerly.....	288	15"	Cem.	319.0
Pearl to Mattoon st.....	313	1'-4"x2'-0"	Brick	445.0
Pearl to Bridge st.....	143	1'-8"x2'-6"	Brick	599.3
Bridge to Worthington st..	480	2'-0" cir.	Brick	..
Worthington to Taylor st...	60	18"	Cem.	}
	244	12"	Cem.	
Lyman st. to E. & A. R. R..	134	18"	Cem.	}
	72	12"	Cem.	
Franklin st., southerly.....	500	12"	Cem.	358.7
Franklin st., northerly.....	397	12"	Cem.	294.1
Essex to Everett st.....	374	15"	Cem.	586.7
Carew st., southerly.....	126	8"	Clay	100.0

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Carew to Prospect st.....	424	24"	Clay	\$1,618.64
	537	20"	Clay	
Prospect st., northerly.....	220	12"	Cem.	178.88
Bancroft st., southerly.....	172	12"	Cem.	123.00
	108	12"	Clay	190.55
	19	10"	Clay	
Bancroft to Montmorenci st.	391	15"	Cem.	535.24
Bancroft st. to Montmorenci st. (see Bancroft st.).....	.....	3'-2"x4' 9"	Brick	.....
Montmorenci to Waverly st.	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly.....	450	10"	Clay	385.61
Douglas to Springfield (see Springfield st.).....	.....	3'-6" cir.	Brick	.....
Merwin st., southerly.....	178	10"	Clay	.....
Eagle st., northerly.....	87	15"	Clay	.....
Eagle st., southerly.....	171	10"	Clay	.....
				\$8,021.65
Chestnut st. I. O., Worcester to Hampden st.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st...	307	15"	Clay	342.65
				738.16
Church st., Garden brook to North st.....	556	18"	Clay	1,440.68
	80	15"	Cem.	157.23
				1,597.91
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	84.12
	55	8"	Clay	6.89
				91.01
Clantoy st., Phoenix street to Dupont st.....	398	15"	Clay	1,130.95
	517	12"	Clay	
	241	10"	Clay	
Clarendon st., Worthington st., westerly.....	205	10"	Clay	225.80
Worthington to St. James ave.	336	18"	Cem.	1,859.31
St. James ave. to Sherman st.	280	15"	Clay	
	605	12"	Clay	
Clark st., Hancock st., west- erly.....	520	10"	Clay	2,085.11
				531.80
Clayton st., Plainfield street, westerly.....	299	18"	Clay	583.76
	100	15"	Clay	163.91
				747.67
Cleveland street, Armory to Liberty st.....	274	18"	Clay	790.48
	250	15"	Clay	
	276	12"	Clay	
	284	10"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Worthington to St. James ave	935	2' 2" x 3' 3"	Brick	\$4,499.10
St. James ave. to Bay st. ....	599	24"	Clay	1,832.21
				<u>\$7,214.25</u>
Forest st., Belmont ave. to				
Forest Park ave. ....	419	12"	Clay }	
	255	10"	Clay }	651.93
Forest Park ave., Fort Pleasant ave. to Garfield st. ....	1,081	24"	Clay	....
	325	20"	Clay }	1,217.48
	562	18"	Clay }	
Sumner ave., northerly. ....	567	12"	Clay	123.15
Sumner ave., southerly. ....	66	10"	Clay	....
	438	10"	Clay	318.29
Pineywoods ave., northerly.	380	10"	Clay	33.87
				<u>1,692.79</u>
Fort st., Main to Water st. ....	633	12"	Cem.	633.43
Fort Pleasant ave., Mil river to Sumner ave. ....	888	2' 4" x 3' 6"	Brick }	13,339.80
	1,825	2' 0" x 3' 0"	Brick }	
Mill st., southerly. ....	428	12"	Clay	293.42
				<u>13,633.22</u>
Franklin st., Garden brook sewer to Main st. ....	434	18"	Cem.	593.13
Garden brook sewer to Chest- nut st. ....	469	18"	Cem. }	1,905.70
	735	15"	Cem. }	
Chestnut to Charles st. ....	273	15"	Clay	303.37
Charles st., easterly. ....	670	12"	Clay	502.35
Cass st. to Webster st. ....	621	12"	Clay }	684.32
	70	10"	Clay }	
Nursery st., westerly. ....	207	15"	Clay	....
Nursery st. to Genesee st. ....	107	15"	Clay	199.93
	557	15"	Cem.	....
	27	12"	Clay	57.66
				<u>4,246.46</u>
Fremont st. Main to Water st.	780	1' 6" x 1' 7"	Brick	702.45
Main st., westerly. ....	656	12"	Cem.	692.92
	30	12"	Clay	65.21
				<u>1,460.58</u>
Fulton st., Cypress to Clinton st. ....	944	12"	Cem.	826.66
*Clinton to Sargeant st. (cost shown under Clinton st.).	1,080	4' 8" x 7' 0"	Brick	....
	42	4' 10" x 7' 3"	Brick	....
Sargeant to John st. ....	555	15"	Cem.	1,219.02
John st., northerly. ....	314	12"	Clay }	674.48
	408	10"	Clay }	
				<u>2,720.16</u>

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Congress st., Garden brook to Main st.....</b>	53	12"	Cem.	\$75.46
	319	12"	Clay	705.44
<b>Garden brook to Chestnut st.</b>	133	20"	Clay	1,463.00
	198	18"	Clay	
	369	15"	Clay	
	288	12"	Clay	
	119	15"	Cem.	277.22
	76	10"	Cem.	
				<hr/> \$2,521.12
<b>Continental st., Sumner ave. southerly.....</b>	215	12"	Clay	102.05
	266	10"	Clay	
<b>Converse street, Sumner ave to Vermont st.....</b>	506	18"	Clay	443.87
<b>Cook's ave., Worthington st. to N. Church ave.....</b>	117	15"	Cem.	573.84
<b>N Church avenue, southerly (includes cost of N. Church ave.).....</b>	69	10"	Cem.	
	185	15"	Clay	
<b>Cornell st., Dartmouth terrace to Wellesley st.....</b>	374	12"	Clay	543.05
<b>Wellesley street., easterly..</b>	186	10"	Clay	208.20
<b>Princeton st., westerly.....</b>	52	10"	Cem.	47.30
	86	8"	Clay	88.04
<b>Princeton st., easterly.....</b>	181	10"	Cem.	132.12
	120	10"	Clay	180.93
				<hr/> 1,199.64
<b>Cortland street, State street northerly.....</b>	164	15"	Clay	672.01
	621	12"	Clay	
<b>Cottage ave. (see Melrose st.)</b>				
<b>Court st. Water st., easterly..</b>	273	12"	Cem.	259.08
<b>Court Square ave., westerly..</b>	431	12"	Cem.	553.45
<b>Main st. to Court Square ave.</b>	200	12"	Cem.	309.67
				<hr/> 1,122.20
<b>Crosby st. Walnut st. westerly</b>	321	10"	Clay	231.38
<b>Cross st. Main to Willow st.</b>	388	18"	Clay	878.12
<b>Willow st., easterly.....</b>	363	12"	Cem.	311.56
				<hr/> 1,189.68
<b>Crystal ave., Belmont ave., easterly.....</b>	251	15"	Clay	24.07
	250	12"	Clay	
	298	10"	Clay	
<b>*Dickinson st., westerly....</b>	362	15"	Clay	650.64
	372	12"	Clay	
				<hr/> 674.71
<b>Cumberland st., Chestnut st., westerly.....</b>	167	10"	Clay	125.29
<b>North Main st., easterly....</b>	205	15"	Clay	300.96
				<hr/> 426.25

\*Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Cypress ave., Cypress street, northerly.....	360	12"	Cem.	\$484.0
	40	12"	Clay	23.7
Cypress st., Conn. river to Garden brook in Ferry street.....	1,081	3'-4"x5'-0"	Brick	10,048.
*Connecticut river to Fulton street.....	385	4'-10"x7'-3"	Con.	3,890
*Fulton st. to Main st.....	691	4'-2"x6'-3"	Con.	6,470.
Dale st., northerly from sewer 60 ft. south of Hubbard ave.....	203	10"	Clay	184.
Winthrop st., southerly. . .	46	8"	Clay	13.
Dartmouth st. St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick }	
Yale to Bowles st.....	295	2'-6"x3'-9"	Brick }	
Dartmouth ter., Worthing- ton st. to Cornell st.....	499	20"	Clay }	
	357	18"	Clay }	
	177	15"	Clay }	
Davis court, Bridge st. to Harrison ave.....	450	12"	Clay	
Dawes st., Bay st., southerly	229	15"	Clay }	
	380	12"	Clay }	
	518	10"	Clay }	
Dawson ave., White street, westerly.....	350	10"	Clay	
Daytona st., Belmont ave. to Sumner ave.....	524	12"	Clay	
Demond avenue. Fisk avenue, westerly.....	510	12"	Clay }	
Plainfield st., easterly.....	403	12"	Clay }	
Dexter st., Knox to Pine st..	558	12"	Cem.	60.
	226	10"	Clay	245.
Dickinson st., Mill st. to Sum- ner ave.....	35	4'-6" cir.	Brick }	
	60	2'-1"x5'-0"	Con.	
	251	5'-0" cir.	Brick }	
	679	4'-0" cir.	Brick }	
	*460	4'-10"x7'-3"	Brick }	44,55;
	*869	4'-8"x7'-0"	Brick }	
	*1,040	4'-4"x6'-6"	Brick }	
	*996	4'-2"x6'-3"	Brick }	

\* Elliptical.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut (through Lebanon) to Quincy st.....	1,852	3'-6"x5'-3"	Brick }	\$21,668.02
Quincy to State st.....	913	3'-4"x5'-0"	Brick }	
<b>Hanover st., York st. to Gard- ner st .....</b>	830	2'-2"x3'-3"	Brick	2,650.26
<b>Harriet st., North Main st. to North st. ....</b>	250	15"	Clay }	377.17
<b>North st., easterly.....</b>	207	12"	Clay }	
	330	10"	Clay	172.92
				550.09
<b>Harrison ave., Main st. to Chestnut st.....</b>	600	15"	Cem.	874.11
	250	8"	Clay	203.61
				1,077.72
<b>Harvard st., Yale to St. James ave .....</b>	316	18"	Clay }	998.99
	300	15"	Clay }	
	291	12"	Cem.	266.84
<b>St. James ave. to Cornell st..</b>	736	12"	Cem.	25.66
				1,291.49
<b>Hawley st., State st. south- erly.....</b>	110	12"	Cem. }	
<b>Monroe st., northerly.....</b>	71	12"	Cem. }	
	330	10"	Clay }	280.57
<b>Hawthorn st. Hancock street, westerly.....</b>	441	12"	Cem.	480.95
<b>Hayden st. State st., northerly</b>	335	12"	Clay }	
	299	10"	Clay }	
	222	8"	Clay }	24.11
<b>Hebron st., North to Chestnut st. ....</b>	663	12"	Clay	519.82
<b>Hickory st., Mill river inter- cepting sewer to Alden st.</b>	754	20"	Clay }	
	228	18"	Clay }	
	184	15"	Clay }	2,446.84
	788	12"	Clay }	
<b>High street, Maple street to Ingraham ave.....</b>	523	18"	Clay }	1,958.92
	567	15"	Clay }	
	550	12"	Clay }	987.71
<b>Ingraham ave., easterly....</b>	846	12"	Clay }	
				2,946.63
<b>Hillman st., Main to Dwight st. ....</b>	350	15"	Clay }	1,436.30
	380	12"	Clay }	
<b>Hillside place, Richelieu court, easterly.....</b>	106	8"	Clay	....
<b>Holly st., I. O., Worcester to Hampden st .....</b>	377	15"	Clay	419.11
<b>Hampden st., southerly....</b>	175	12"	Clay	117.69
				536.80

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
King st. to Chapel st.....	152	10"	Cem.	\$166.50
	101	10"	Clay	149.70
Pendleton ave., northerly...	312	12"	Cem.	256.78
Tyler st., northerly.....	286	12"	Cem.	181.30
Quincy st., northerly.....	118	10"	Cem.	131.15
Monroe st., southerly.....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly.....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
Edgemont st., State street, northerly.....	499	10"	Clay	\$
	201	8"	Clay	
**Edgewood st., Acorn to Bay st. ....	1,001	8"	Clay	
Edwards st., Chestnut street, easterly.....	551	12"	Cem.	
Elliott st., Salem st., southerly	610	15"	Cem.	730.48
	243	12"	Cem.	309.08
Elm st., submerged outlet....	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st. ....	385	3'-9" cir.	Brick	10,744.19
Water st. to Main st.....	996	3'-8" x 5'-6"	Brick	
Elmwood st., Main st. to Hanover st.....	300	18"	Clay	}
	249	15"	Clay	
	299	12"	Clay	
Emery st., Boylston st., east and west .....	542	12"	Cem.	
Essex street, Garden brook, westerly.....	418	15"	Cem.	355.00
Garden brook to Chestnut st.	1,115	2'-2' x 3'-3"	Brick	7,105.10
	204	18"	Cem.	355.33
Essex st., I. O., Oak to Myrtle street.....	254	12"	Clay	}
	426	10"	Clay	
Oak st., easterly.....	183	10"	Clay	248.23
Euclid ave., Belmont ave. to Dickinson st.....	389	12"	Clay	}
	741	10"	Clay	
	77	8"	Clay	50.67
*Dickinson st., westerly...	350	15"	Clay	}
	350	12"	Clay	
Dickinson st., easterly.....	275	10"	Clay	307.83
Everett st., Chestnut st. to brook.....	323	15"	Cem.	308.39
brook to Cass st.....	926	15"	Clay	821.43
Cass st., easterly.....	313	15"	Clay	555.74

\*\*Sanitary sewer. \*Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Fairbanks place, Worthington st., northerly.....	249	10"	Clay	\$220.66
Fairfield street, Litchfield to Garfield st.....	376	12"	Clay	.....
	556	10"	Clay	\$351.64
Fairmount st., Commonwealth ave. to Lawndale st	350	10"	Clay	351.64
Farnsworth st., Hamburg st. to Chicopee line.....	530	20"	Clay	1,653.14
	279	18"	Clay	827.14
	248	12"	Clay	
	264	10"	Clay	
				2,480.28
Federal st., Worthington to Pearl st.....	567	12"	Cem.	740.92
Summer st., southerly.....	274	10"	Clay	172.00
Ferry st., Main to Garden brook (see Cypress st.)...	.....			912.92
Garden brook to Chestnut st	1,168	2'-4"x3'-6"	Brick	5,417.12
Main st., easterly.....	*394	4'-2"x6'-3"	Con.	11,067.29
	1,004	4'-9" cir.	Con.	
				16,484.41
Firglade ave., Sumner ave. to Spruceland st.....	350	10"	Clay	84.44
	203	8"	Clay	
Spruceland to Pineywoods avenue.....	447	10"	Clay	.....
	67	8"	Clay	.....
Pineywoods ave. to Washington boulevard.....	242	12"	Clay	395.64
	176	10"	Clay	
				480.08
Fisk ave., Rowland to Worcester ave. ....	272	24"	Clay	1,073.11
	275	20"	Clay	
	298	10"	Clay	
Wason ave., southerly.....	299	24"	Clay	1,216.81
	294	20"	Clay	
	248	12"	Clay	
				2,289.92
Florence st., Pine st., easterly	824	15"	Cem.	2,227.38
	651	12"	Cem.	
Hancock st., easterly.....	253	10"	Cem.	323.93
	26	10"	Clay	31.11
				2,582.42
Florentine gardens, Pineywoods ave., northerly.....	421	10"	Clay	22.83
Florida st., Worthington to Ingersoll Grove st.....	273	15"	Cem.	359.06
	561	12"	Cem.	523.88

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
<b>Lebanon st.</b> (see Hancock) . . . .	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly . . . . .	158	2'-0" x 3'-0"	Brick	\$1,495.77
Hancock to Eastern ave . . .	606	18"	Cem. }	1,842.70
	816	15"	Cem. }	\$3,338.47
<b>Ledyard st.</b> , Armory street, northwesterly . . . . .	478	10"	Clay	321.39
<b>Lenox st.</b> , Sumner avenue, southerly . . . . .	465	10"	Clay	53.58
<b>Lester st.</b> , Sumner ave. to Vermont st. . . . .	286 279	12" 10"	Clay } Clay }	324.11
<b>Lexington ave.</b> Chestnut st. to Massasoit st. . . . .	668	12"	Clay	546.52
Massasoit st., easterly . . . .	145	2'-0" x 3'-0"	Con.	594.63
				1,141.15
<b>Leyfred terrace</b> , Belmont ave., northerly . . . . .	300 317	18" 15"	Clay } Clay }	957.30
<b>Liberty st.</b> , Garden brook to Main st . . . . .	118 70 172	12" 1'-6" x 1'-7" 12"	Clay } Brick } Cem. }	179.19
Garden brook to Chestnut st.	967	15"	Cem. }	1,101.78
	171	8"	Cem. }	
Chestnut to Webster st. . . . .	784	2'-4" x 3'-6"	Brick	
	659	1'-10" x 2'-9"	Brick	9,123.49
	684	2'-2" x 3'-3"	Brick	
Webster to Armory st. . . . .	366	3'-0" x 4'-6"	Brick	5,383.15
	1,282	2'-2" x 3'-3"	Brick	
	317	1'-10" x 2'-9"	Brick	2,539.81
	449	2'-2" x 3'-3"	Brick	
Armory to Wentworth ave. .	1,194	24"	Clay	
	1,103	18"	Clay	5,227.99
	714	15"	Clay	
				23,555.41
<b>Lillian st.</b> , Oak st., easterly . .	297	12"	Clay	232.47
<b>Lincoln st.</b> , Magazine street to Federal st. . . . .	823	12"	Clay	676.54
<b>Linden st.</b> Chestnut to Cass st	470	18"	Cem. }	1,318.15
	862	15"	Cem. }	
<b>Litchfield st.</b> Belmont ave. to Fairfield st . . . . .	159	15"	Clay	335.11
Garfield st., northerly . . . .	69	6"	Clay	7.10
				342.21
<b>Locust st.</b> , York to Mill st. .	84	3'-0" x 4'-6"	Brick	
	364	2'-9" x 4'-1 1/2"	Brick	6,804.18
	686	2'-6" x 3'-9"	Brick	
<b>Logan st.</b> , Collins st., south- erly . . . . .	97	10"	Clay	109.36
Collins to Ladd st. . . . .	183	10"	Clay	140.36

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet	Size.	Material	Cost.
Garden brook sewer (see private ways).				
Gardner ave., Gardner street, northerly.....	151	8"	Clay	\$73.11
Gardner st. Hanover to Water street .....	655	2'-0"x3'-0"	Brick	\$1,995.23
Water to Main st .....	226	12"	Clay	423.58
	199	10"	Clay	2,418.81
Garfield st., Forest Park ave., easterly .....	556	15"	Clay	967.16
	514	12"	Clay	329.87
Belmont ave., westerly.....	531	10"	Clay	1,297.03
Genesee st., Franklin st., southerly .....	200	10"	Clay	234.87
George st., Dexter st., southerly .....	409	10"	Clay	344.52
Girard ave., Bay st. to McKnight st.....	944	12"	Clay	863.45
Gordon st., Pasadena ave. to White st.....	618	15"	Clay	555.79
Governor st., Armory st. to Penacook ave.....	424	20"	Clay	1,276.19
	401	18"	Clay	
	402	15"	Clay	
	224	12"	Clay	
Grace st., Birnie ave., easterly	274	15"	Cem.	51.56
Grand ave., Revere st., easterly .....	250	15"	Clay	....
	252	12"	Clay	....
Revere st., westerly.....	151	10"	Clay	....
Grant st., Magazine to Armory street .....	588	12"	Cem.	477.26
Granville st., Eastern ave. to Logan st.....	495	12"	Cem.	560.46
Gray's ave., Cypress avenue, northerly .....	495	12"	Cem.	460.92
Greene st., Hancock to Eastern ave.....	610	18"	Cem.	1,897.68
	793	15"	Cem.	
Green lane, Rimmon avenue, westerly and northerly...	744	12"	Clay	....
	143	10"	Clay	....
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	133.60
Greenwich st., Birnie avenue, easterly .....	300	12"	Clay	467.79
	300	10"	Clay	

## SEWER SYSTEM—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	C
Greenwood st. Garden brook to Main st. ....	386 538	12" 15"	Cem. Clay }	
Garden brook, easterly. ....	448 117	12" 10"	Clay Clay }	
Grenada terrace, Dickinson st. to Ventura st. ....	220 310	18" 15"	Clay Clay }	\$708.40
Ventura st., easterly. ....	309 216	12" 10"	Clay Clay }	397.20
Grosvenor st., North to Chestnut street. ....	131 648	18" 15"	Cem. Cem. }	
Grove st. North Main street, easterly. ....	409	10"	Clay }	
North st., westerly. ....	270	10"	Clay }	
Groveland ave., Dickinson st. to town line. ....	533 117	12" 10"	Clay Clay }	
Grover street, Armory street to Liberty st. ....	300 303 298 432	18" 15" 12" 10"	Clay Clay Clay Clay }	
Hall st. Belmont ave. to Dick- inson st. ....	500 474	12" 10"	Clay Clay }	904.50
*Dickinson st., southerly. ....	774	12"	Clay	698.20
Hamburg st., Springfield st., easterly. ....	367 235	20" 10"	Clay Clay }	
Hampden st., Water street to Main st. ....	569	15"	Cem.	
Hampden st. I. O., Chestnut st., easterly. ....	285 174	12" 12"	Cem. Clay }	187.20 299.10
Holly st., easterly. ....	150	10"	Clay	165.20
Pine st., westerly. ....	200 199	12" 10"	Clay Clay }	311.50
Hampshire st., I. O., Oak st., westerly. ....	300 398	12" 10"	Clay Clay }	633.50
Oak st., easterly. ....	250	12"	Cem.	206.20
Myrtle st., westerly. ....	300	10"	Clay	295.00
Hancock street, Mill river to Central st. ....	920	12"	Clay	866.30
Central to Walnut st. ....	218 1,343	18" 15"	Cem. Cem. }	1,838.50
Walnut to Alden st. ....	122	12"	Cem.	88.00
Lebanon to Alden st. ....	827	2'-0"x3'-0"	Brick	5,009.60

\*Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Walnut (through Lebanon) to Quincy st.....	1,852	3'-6"x5'-3"	Brick	\$21,668.02
Quincy to State st.....	913	3'-4"x5'-0"	Brick	
				\$29,470.50
Hanover st., York st. to Gard- ner st.....	830	2'-2"x3'-3"	Brick	2,650.26
Harriet st., North Main st. to North st.....	250	15"	Clay	377.17
North st., easterly.....	207	12"	Clay	
	330	10"	Clay	172.92
				550.09
Harrison ave., Main st. to Chestnut st.....	600	15"	Cem.	874.11
	250	8"	Clay	203.61
				1,077.72
Harvard st., Yale to St. James ave.....	316	18"	Clay	998.99
	300	15"	Clay	
	291	12"	Cem.	266.84
St. James ave. to Cornell st..	736	12"	Cem.	25.66
				1,291.49
Hawley st., State st. south- erly.....	110	12"	Cem.	280.57
Monroe st., northerly.....	71	12"	Cem.	
	330	10"	Clay	
Hawthorn st. Hancock street, westerly.....	441	12"	Cem.	480.95
Hayden st. State st., northerly	335	12"	Clay	24.11
	299	10"	Clay	
	222	8"	Clay	
Hebron st., North to Chestnut st.....	663	12"	Clay	519.82
Hickory st., Mill river inter- cepting sewer to Alden st.	754	20"	Clay	2,446.84
	228	18"	Clay	
	184	15"	Clay	
	788	12"	Clay	
High street. Maple street to Ingraham ave.....	523	18"	Clay	1,958.92
	567	15"	Clay	
	550	12"	Clay	
Ingraham ave., easterly....	846	12"	Clay	987.71
				2,946.63
Hillman st., Main to Dwight st.....	350	15"	Clay	1,436.30
	380	12"	Clay	
Hillside place, Richelieu court, easterly.....	106	8"	Clay	....
Holly st., I. O., Worcester to Hampden st.....	377	15"	Clay	419.11
Hampden st., southerly....	175	12"	Clay	117.69
				536.80

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Hollywood st., Common- wealth ave., easterly.....	211 241	12" 10"	Clay Clay }	
Holyoke st., Main st., west- erly .....	734	12"	Cem.	
Home st., Liberty st., west- erly .....	424	10"	Clay	\$302.25
Penacook ave., easterly....	246	10"	Clay	185.02
Homer st., State st., southerly	31	12"	Clay }	
	370	10"	Clay }	
Horace st., Dickinson st., northerly.....	363 411	12" 10"	Clay Clay }	
Howard st. Main st., westerly	344	15"	Clay }	837.2
	321	12"	Clay }	
Water st., easterly.....	276	12"	Cem.	255.7
	30	12"	Clay	43.4
Water st., westerly.....	314	12"	Cem.	326.9
	31	12"	Clay	43.4
Hubbard ave., Main street easterly .....	257 321	15" 12"	Clay Clay }	
Hunt terrace, Allen street, northerly .....	304	10"	Clay	
Hunter place, State street, northerly .....	350 313	12" 10"	Clay Clay }	
Huntington st., Birnie ave., easterly .....	300	12"	Clay }	
	300	10"	Clay }	
Hyde ave., Fisk ave. to Plain- field st. ....	301 300	15" 12"	Clay Clay }	
	219	10"	Clay }	
Ingersoll grove, Worthington st., northerly.....	782 218	12" 8"	Cem. Clay }	1,038.8
Bowdoin st., easterly. ....	132	10"	Clay	106.2
Ionia st., State st., northerly	720	10"	Clay	
Irvington ave., Sumner ave.. to Morningside Park.....	300 400	12" 10"	Clay Clay }	
James st., Cedar st. northerly	289	15"	Cem. }	
	534	12"	Cem. }	
Jefferson ave., North Main st. to Chestnut st. ....	299 299	20" 18"	Cem. Clay }	
See private ways also.	276	15"	Clay }	1,663.1
	60	12"	Clay }	



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Middlesex st., Wilbraham road, southerly.....	296	15"	Clay }	\$580.26
	304	12"	Clay }	
Mill river, intercepting sewer, Mill river to Locust st...	370	5'-3" cir.	Brick }	\$6,066.64
	691	4'-0" cir.	Brick }	
Locust st. to Hickory st....	587	4'-0" cir.	Brick }	42,706.00
	131	3'-6" x 5'-3"	Brick }	
	1,743	5'-9" cir.	Brick }	
	779	4'-3' cir.	Brick }	
	1,611	3'-3' cir.	Brick }	9,355.23
*in Mill and Hickory sts...	833	2'-2" x 3'-3"	Brick }	
*Hickory st. to Gunn square brook by northerly shore of Watershops pond.....	4,495	2'-2" x 3'-3"	Brick	45,545.71
				103,673.58
Mill st., Main st., easterly....	236	8"	Cem.	75.45
Locust to Pine st.....	943	2'-6" x 3'-9"	Brick	4,764.79
Knox to Maple st.....	352	18"	Clay	668.24
				5,508.48
Monmouth st., Dorchester st., northerly and easterly....	199	12"	Clay	218.15
	171	10"	Clay	121.75
Yale st., westerly.....	64	12"	Clay	45.95
	278	10"	Clay	281.47
Berkeley st., northwesterly..	350	12"	Clay	235.62
				902.94
Monroe st., Hancock to East- ern ave .....	611	18"	Cem. }	1,983.29
	789	15"	Cem. }	
Eastern ave. to Colton st..	316	12"	Cem. }	
Monson ave., Greene street, northerly .....	200	8"	Clay	....
Montmorenci st. Chestnut to Massasoit st.....	64	12"	Clay	74.82
	612	2'-10" x 4'-5"	Con.	2,725.07
				2,799.89
Montrose st., State to Burr st.	338	15"	Clay }	75.74
	217	12"	Clay }	
	329	10"	Clay }	
Mooreland ave., Carew street, northerly to Van Horn ave	601	18"	Clay }	1,467.66
	301	15"	Clay }	
	299	12"	Clay }	
	212	10"	Clay }	
Morgan st., Garden brook to Main st .....	252	12"	Cem.	199.08
Garden brook to North st.:	25	18"	Cem.	48.07
	634	18"	Clay	1,460.31
				1,707.46

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Lebanon st. (see Hancock)	....	3'-6" x 5'-3"	Brick	....
Hancock st., westerly.....	158	2'-0" x 3'-0"	Brick	\$1,495.5
Hancock to Eastern ave ...	606	18"	Cem. }	1,842.5
	816	15"	Cem. }	
Ledyard st., Armory street, northwesterly.....	478	10"	Clay	321.5
Lenox st., Sumner avenue, southerly .....	465	10"	Clay	
Lester st. Sumner ave. to Vermont st. ....	286	12"	Clay }	
	279	10"	Clay }	
Lexington ave. Chestnut st. to Massasoit st.....	668	12"	Clay	546.8
Massasoit st., easterly.....	145	2'-0" x 3'-0"	Con.	594.8
Leyfred terrace, Belmont ave., northerly.....	300	18"	Clay }	
	317	15"	Clay }	
Liberty st., Garden brook to Main st .....	118	12"	Clay	179.1
	70	1'-6" x 1'-7"	Brick	
	172	12"	Cem.	1,101.5
Garden brook to Chestnut st.	967	15"	Cem. }	
	171	8"	Cem. }	
Chestnut to Webster st.....	784	2'-4" x 3'-6"	Brick	9,123.5
	659	1'-10" x 2'-9"	Brick	
	684	2'-2" x 3'-3"	Brick	
Webster to Armory st.....	366	3'-0" x 4'-6"	Brick	5,383.5
	1,282	2'-2" x 3'-3"	Brick	
	317	1'-10" x 2'-9"	Brick	2,539.5
	449	2'-2" x 3'-3"	Brick	
Armory to Wentworth ave..	1,194	24"	Clay	5,227.5
	1,103	18"	Clay	
	714	15"	Clay	
Lillian st., Oak st., easterly..	297	12"	Clay	
Lincoln st., Magazine street to Federal st.....	823	12"	Clay	
Linden st. Chestnut to Cass st	470	18"	Cem. }	
	862	15"	Cem. }	
Litchfield st. Belmont ave. to Fairfield st .....	159	15"	Clay	335.5
Garfield st., northerly.....	69	6"	Clay	7.
Locust st., York to Mill st..	84	3'-0" x 4'-6"	Brick	
	364	2'-9" x 4'-11"	Brick	
	686	2'-6" x 3'-9"	Brick	
Logan st., Collins st., south- erly .....	97	10"	Clay	109.36
Collins to Ladd st.....	183	10"	Clay	140.36

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Calhoun st., northerly. . . .	256	8"	Clay	\$48.13
Waverly to Grove st. . . . .	362	12"	Clay	302.86
Harriet st., southerly. . . . .	86	8"	Clay	....
Harriet st., northerly. . . . .	150	10"	Clay	106.43
				<hr/> \$2,309.03
Northampton ave., Wilbra-				
ham road, southerly. . . . .	1,101	12"	Clay	830.79
Gunn square, northerly. . . .	126	10"	Clay	103.71
Gunn square to King st. . . .	249	12"	Clay	325.24
	202	10"	Clay	
				<hr/> 1,259.74
North Church ave., Cook's				
ave., easterly. . . . .	209	10"	Cem. }	....
Cook's avenue, westerly (for				
cost see Cook's ave.) . . . .	133	10"	Cem. }	
No. Main st. Morgan st. south-				
erly. . . . .	232	8"	Clay	171.18
Morgan st., northerly. . . . .	173	8"	Clay	90.69
Arch to Osgood st. . . . .	730	15"	Cem.	713.66
*Arch st. to Jefferson ave. . .	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st. . .	359	24"	Clay	2,568.01
	420	20"	Clay	
	285	15"	Clay	
	170	12"	Clay	
Grove st., northerly. . . . .	170	12"	Clay	226.45
Douglas to Harriet st. . . . .	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st. . . . .	250	24"	Clay	470.75
Douglas to Eagle st. . . . .	326	2'-4"x3'-6"	Brick	1,840.24
	272	1'-10"x2'-9"	Brick	
Eagle st., northerly. . . . .	142	24"	Clay	449.66
Wason ave., southerly. . . . .	215	2'-0"x3'-0"	Brick	860.00
Wason ave. to Chicopee	349	1'-8"x2'-6"	Con.	1,566.32
line. . . . .	106	15"	Clay	173.58
	348	12"	Clay	281.41
Norwood st. Main to Hanover				
st. . . . .	1,051	12"	Cem.	12,260.57
				1,156.64
Nursery st. Liberty to Frank-				
lin st. . . . .	694	2'-8" cir.	Brick	2,284.52
Franklin st., northerly. . . .	587	2'-8" cir.	Brick	....
				<hr/> 2,284.52
Oak st., Union to State. . . .	741	2'-0"x3'-0"	Con.	3,092.11
Union to Tyler st. . . . .	220	18"	Clay	752.00
	268	15"	Clay	
Walnut st. to Tyler st. . . . .	158	18"	Cem.	280.65
Oak st. I. O. Chicopee river				
to Main st. . . . .	684	4'-0" cir.	Con.	4,353.51
North from Main, . . . . .	179	15"	Cem. }	637.00
	171	12"	Cem. }	
Main st., southerly. . . . .	590	2'-2"x3'-3"	Brick	2,345.84

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Magnolia ter. east side, Summer ave. to Spruceland ave.	620	10"	Clay	\$1,23
west side, Summer ave. to Spruceland ave.....	621	10"	Clay	
overflow connection between east and west side.....	62	8"	Clay	2
Washington ave. to Spruceland ave.....	362	24"	Clay	2
	602	12"	Clay	
Main st., Pecousic avenue to Longhill st.....	191	2'-4"x3'-6"	Con.	1,07
Mill river to Mill st.....	258	10"	Clay	34
Locust st., southerly.....	800	15"	Cem.	1,43
York to B. & A. R.R.....	56	7'-0" cir.	Brick	20,81
	1,772	6'-6" cir.	Brick	
	906	5'-6" cir.	Brick	
	990	5'-0" cir.	Brick	34,45
	1,624	3'-4"x5'-0"	Brick	
	864	2'-4"x3'-6"	Brick	
	263	12"	Clay	16
Cypress to Emery st.....	298	15"	Clay	1,21
	270	12"	Clay	
Emery st., southerly.....	278	12"	Cem.	38
Emery st. to Sargeant.....	341	24"	Clay	2,53
	442	20"	Clay	
	480	18"	Clay	
	186	15"	Clay	
Main st., I. O., Chicopee river to Pine st.....	2,321	2'-4"x3'-6"	Brick	7,63
Pine to Cedar st.....	500	18"	Cem.	87
	185	15"	Cem.	
	103	12"	Clay	12
Cedar to Lyons st.....	1,110	2'-0"x3'-0"	Brick	5,02
Chicopee river through private land and Main st. to Beaudry st.....	699	18"	Clay	1,53
	232	15"	Clay	
	212	10"	Clay	
Parker street, westerly.....	260	12"	Clay	25
Lyons st., easterly.....	205	24"	Clay	
	245	18"	Clay	
	129	12"	Clay	1,33
Malden st. Allen st., southerly	542	15"	Clay	
	291	12"	Clay	
	494	10"	Clay	
Manhattan st., Eastern ave. to Walnut st.....	290	15"	Clay	
	645	12"	Clay	
	205	10"	Clay	

SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Maple st., State to Temple st.	315	18"	Clay	\$675.51
				51.55
Park to High st.	225	18"	Clay	505.21
Union st., southerly	515	18"	Cem. }	959.13
	135	12"	Cem. }	
Central st., southerly	38	18"	Cem. }	160.95
	388	12"	Cem. }	
	784	12"	Clay	1,289.58
Pine st., northerly	195	15"	Cem. }	1,093.44
	522	12"	Cem }	
Mapledell street, State street, northerly	337	15"	Clay }	\$4,735.37
	300	12"	Clay }	70.80
	346	10"	Clay }	
Maplewood ter. Fort Pleasant ave., easterly	682	15"	Clay }	
	329	12"	Clay }	22.21
	178	10"	Clay }	
Marble st., Main st., easterly	222	18"	Cem. }	
	586	15"	Cem. }	1,178.97
	242	12"	Cem. }	
Marengo Park, Belmont ave., easterly	443	15"	Clay }	
	612	12"	Clay }	95.25
	778	10"	Clay }	
Margaret st., Water st., west- erly	520	12"	Cem.	540.89
Water st., easterly	825	12"	Cem.	855.32
	30	12"	Clay	31.41
				1,427.62
Marion st., Bay st., southerly	838	12"	Clay	915.66
Chapin st., easterly	94	10"	Clay }	25.89
	319	8"	Clay }	
				941.55
Market st. State st. northerly	119	10"	Clay	
Sanford st., southerly	200	12"	Clay	412.04
Sanford st. to Harrison ave	301	15"	Clay }	1,197.72
	350	12"	Clay }	
Harrison ave., southerly	154	12"	Cem.	....
				1,609.76
Marshall place (see Melrose street)				
Marvin st., Pratt st., southerly	149	10"	Clay	218.09
Mason place, Dickinson st., southerly	200	12"	Clay }	433.02
	276	10"	Clay }	
Mason st., State to Pease st.	349	15"	Clay }	746.99
	359	12"	Clay }	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Massachusetts ave., Wilbraham road, southerly.....	300	15"	Clay	}
	300	12"	Clay	
	227	10"	Clay	
Massasoit place, Massasoit st., easterly .....	381	12"	Clay	
Massasoit st., Carew street, northerly.....	709	12"	Cem.	\$579.
	131	10"	Clay	113.
Lexington ave., southerly...	300	12"	Clay	}
	298	10"	Clay	
Montmorenci st. to Lexington ave.....	354	2'-2"x3'-3"	Con.	1,451.
Montmorenci st., northerly.	152	10"	Clay	113.
Mattoon street, Chestnut to Salem st.....	356	1'-4"x2'-0"	Brick	}
	87	15"	Cem.	
Maynard st., State st. to Shattuck ave.....	431	15"	Clay	}
	400	12"	Clay	
McKnight st., Catharine to Sherman st.....	255	15"	Cem.	421.
	30	15"	Clay	56.
Catharine to Bowles st....	141	10"	Cem.	67.
	26	10"	Clay	75.
Bowles street to Girard ave.	119	12"	Cem.	81.
	263	10"	Clay	233.
Mechanic st., Water street, westerly.....	302	12"	Cem.	205.
	20	8"	Clay	72.
Medford st., Birnie avenue, easterly.....	390	12"	Clay	}
	183	10"	Clay	
Melrose st., sewer between Hickory st. and Melrose.	429	18"	Clay	}
Eastern ave. to Walnut st..	263	15"	Clay	
	558	10"	Clay	
Marshall place, Eastern ave. to Walnut.....	415	10"	Clay	}
	169	8"	Clay	
Cottage avenue, Melrose to Marshall place .....	74	12"	Clay	
Merrick avenue, King street, southerly .....	275	12"	Cem.	48.50
	24	12"	Clay	29.26
Merwin st., North Main to Chestnut st.....	774	15"	Clay	



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in feet.	Size.	Material.	Cost.
Wason ave. to Demond ave.	304	24"	Clay	\$1,253.59
	249	20"	Clay	
	53	18"	Clay	
Pleasant st., Bay st., southerly	296	12"	Cem.	\$17,417.96
Plymouth st., Fulton st., east- erly .....	375	10"	Clay	249.74
Pomona st., Sumner avenue, northerly .....	580	12"	Clay	196.59
	297	10"	Clay	459.94
Portland st., Birnie ave., east- erly .....	251	12"	Clay	204.92
	224	10"	Clay	664.86
Portsmouth street.....	212	12"	Clay	351.35
Pratt street, Chestnut to Marvin street.....	350	15"	Clay	253.65
	299	12"	Clay	869.53
Prince st., King to Lebanon st. ....	329	12"	Cem.	333.15
Princeton st., Bay to Amherst street .....	103	18"	Cem.	289.08
	689	18"	Clay	724.15
	151	15"	Clay	177.72
Vale to Vassar st.....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	Cem.	195.52
Private ways and private lands:				1,386.47
Armory Hill sewer from Ar- mory st., through private grounds east of Armory st. to Worthington st. ....	150	2'-5" x 3'-7 $\frac{1}{2}$ "	Brick	5,318.04
	900	2'-8" x 4'-0"	Brick	
	249	2'-1" x 3'-1 $\frac{1}{2}$ "	Brick	
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts in front and around High school .....	751	12"	Cem.	408.75
	492	24"	Clay	848.26
High school to State st..	88	24"	Clay	192.35
Cemetery brook, Morris st., easterly, north of Central street .....	174	24"	Clay	1,449.36
Chester to Hancock street.	218	8"	Clay	569.59
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st. ....	2,936	5'-6" cir.	Brick	....
	766	5'-0" cir.	Brick	47,577.34
	1,303	4'-6" cir.	Brick	
	236	3'-0" x 4'-6"	Brick	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	C
Morris st., Main st., easterly.	915	2'-0" x 3'-0'	Brick	\$2,942.88
	496	12"	Cem.	359.07
Mountainview st., Forest Park ave., easterly....	297	12"	Clay	
	297	10"	Clay	
Mulberry st., Maple st., east- erly and northerly.....	687	15"	Cem.	1,246.17
	629	12"	Cem.	
	246	10"	Clay	
west from Ridgewood ter- race.....	144	15"	Clay	.....
Murray Hill ave., Liberty st. northerly.....	....	....	Clay	.....
Myrtle st., Card Factory Pond brook, northerly.....	107	10"	Clay	
	237	8"	Clay	
Myrtle st., I. O., Main to Wor- cester.....	377	24"	Clay	1,003.44
Worcester st., southerly....	378	10"	Clay	355.34
Berkshire st., southerly....	180	10"	Clay	189.63
Hampshire st. to Essex ...	275	10"	Clay	310.44
Nelson ave., Greene street, northerly....	90	12"	Cem.	27.96
Lebanon st. to King.....	188	10"	Cem.	126.54
	67	10"	Clay	93.63
Nelson street, Nursery street, easterly ..	308	24"	Clay	213.02
New st., E. Court st., north- erly ..	237	12"	Cem.	
	33	8"	Clay	
Dwight st., westerly.....	164	10"	Clay	203.79
Newland st., Plainfield st., westerly.....	350	18"	Clay	
	349	15"	Clay	
	251	12"	Clay	
Newman st., Knox st., west- erly ..	175	12"	Cem.	366.08
Norfolk st., Wilbraham road, southerly ..	300	15"	Clay	
	300	12"	Clay	
	229	10"	Clay	155.85
North st. Carew st., northerly	190	8"	Cem.	84.88
Church to Grosvenor st....	68	18"	Cem.	157.13
Morgan to Ringgold st....	198	18"	Cem.	356.84
Osgood to Hebron st.....	130	18"	Clay	426.85
	165	10"	Clay	
Bancroft st. to Brookline ave	302	18"	Clay	411.55
Bancroft st., northerly.....	153	12"	Cem.	217.13
	64	12"	Clay	
Jefferson ave., northerly....	233	8"	Clay	197.21



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Calhoun st., northerly. . . . .	256	8"	Clay	\$48.13
Waverly to Grove st. . . . .	362	12"	Clay	302.86
Harriet st., southerly. . . . .	86	8"	Clay	....
Harriet st., northerly. . . . .	150	10"	Clay	106.48
				<hr/> \$2,309.03
Northampton ave., Wilbra-				
ham road, southerly. . . . .	1,101	12"	Clay	830.79
Gunn square, northerly. . . . .	126	10"	Clay	103.71
Gunn square to King st. . . . .	249	12"	Clay	325.24
	202	10"	Clay	
				<hr/> 1,259.74
North Church ave., Cook's				
ave., easterly . . . . .	209	10"	Cem. }	....
Cook's avenue, westerly (for				
cost see Cook's ave.) . . . . .	133	10"	Cem. }	
No. Main st. Morgan st. south-				
erly. . . . .	232	8"	Clay	171.18
Morgan st., northerly. . . . .	173	8"	Clay	90.69
Arch to Osgood st. . . . .	730	15"	Cem.	713.66
*Arch st. to Jefferson ave. . . . .	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st. . . . .	359	24"	Clay	2,568.01
	420	20"	Clay	
	285	15"	Clay	
	170	12"	Clay	
Grove st., northerly. . . . .	170	12"	Clay	226.45
Douglas to Harriet st. . . . .	551	1'-8"x2'-6"	Brick	1,874.35
Harriet to Waverly st. . . . .	250	24"	Clay	470.75
Douglas to Eagle st. . . . .	326	2'-4"x3'-6"	Brick	1,840.24
	272	1'-10"x2'-9"	Brick	
Eagle st., northerly. . . . .	142	24"	Clay	449.66
Wason ave., southerly . . . . .	215	2'-0"x3'-0"	Brick	860.00
Wason ave. to Chicopee	349	1'-8"x2'-6"	Con.	1,566.32
line. . . . .	106	15"	Clay	173.58
	348	12"	Clay	281.41
Norwood st. Main to Hanover				
st. . . . .	1,051	12"	Cem.	12,260.57
				<hr/> 1,156.64
Nursery st. Liberty to Frank-				
lin st. . . . .	694	2'-8" cir.	Brick	2,284.52
Franklin st., northerly. . . . .	587	2'-8" cir.	Brick	....
				<hr/> 2,284.52
Oak st., Union to State. . . . .	741	2'-0"x3'-0"	Con.	3,092.11
Union to Tyler st. . . . .	220	18"	Clay	752.00
	268	15"	Clay	
Walnut st. to Tyler st. . . . .	158	18"	Cem.	280.65
Oak st. I. O. Chicopee river				
to Main st. . . . .	684	4'-0" cir.	Con.	4,353.51
North from Main. . . . .	179	15"	Cem. }	637.00
	171	12"	Cem. }	
Main st., southerly . . . . .	590	2'-2"x3'-3"	Brick	2,345.84

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER	Length in Feet.	Size.	Material.	Cost
Rowland st., Conn. river to North Main st., including 630' in Douglas st. ....	579 51 1,247 1,330	5'-3'' cir. 1'-8'' x 2'-6'' 6'-6'' cir. 6'-0'' cir.	Brick Brick Brick Brick	\$
Rutland ave., Wilbraham road to State st. ....	199	8''	Clay	
Rutledge ave., Main street, easterly .....	574	24''	Clay	
Sachem st., Dickinson st., northerly .....	330	10''	Clay	
Salem st., Pearl st., south and east .....	283 99 290	18'' 15'' 12''	Cem. Cem. Cem.	
*Sanford st. ....	536	3'-2'' x 4'-9''	Brick	
*Sargeant st., Fulton to Main (cost shown under Clinton street) .....	920	4'-6'' x 6'-9''	Brick	
School st., Union to Mulberry street .....	549	15''	Clay	
Union st., northerly .....	262	10''	Clay	\$620.95 204.00
Scott st., White st. to Po- mona st. ....	300 347	12'' 10''	Clay Clay	
Searle place, Walnut street, easterly .....	178	10''	Clay	
Seventh st., Fulton to Main st	830	12''	Cem.	
Sewer in avenue (see private ways).				
Sewer (see private ways).				
Sharon st., Garden brook to Main st. ....	360	15''	Cem.	762.77
Garden brook, easterly ....	601 463	18'' 12''	Cem. Cem.	1,273.96
Shattuck ave., Maynard ave. to Willard ave. ....	200 143	10'' 8''	Clay Clay	
Willard ave., easterly ....	50	8''	Clay	
Shefford st., Springfield st., westerly .....	293 350	12'' 10''	Clay Clay	
Sheldon st., Birnie ave., to N. Main st. ....	311 317	12'' 10''	Clay Clay	
Sherman st., Bay to Clarendon st. ....	175	12''	Cem.	571.12
Bay to McKnight st. ....	443	12''	Cem.	
State to McKnight st. ....	301 301	18'' 15''	Clay Clay	
	544	12''	Clay	

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Osgood st., Garden brook to Main st. ....	257	12"	Cem.	\$320.94
Garden brook to North st.	588	18"	Cem.	1,261.32
	92	18"	Clay	174.87
Oxford st., Riverview terrace, northerly .....	68	12"	Clay	\$1,757.13
	227	12"	Clay	....
	291	10"	Clay	512.94
Ozark street, Grand avenue, southerly .....	456	10"	Clay	512.94
Palmer avenue, Locust street, easterly .....	351	18"	Clay	61.80
	337	15"	Clay	1,190.78
	14	12"	Cem.	....
				1,190.78
Park st., Main to Willow st.	395	24"	Clay	1,609.31
Willow to Maple st. ....	200	24"	Clay	1,431.05
	557	18"	Clay	
Parker st., I. O., Chicopee river to Main st. ....	32	24"	Clay	3,040.36
	221	12"	Clay	261.81
Main st., southerly .....	1,098	24"	Clay	2,486.05
*Loon pond to B. & A. R. R.	1,227	12"	Clay	1,266.36
				4,014.22
Parkside ave., Carew st. to Van Horn ave., .....	350	18"	Clay	
	350	15"	Clay	
	351	12"	Clay	1,180.15
	300	10"	Clay	
Parkwood st., Sumner ave., southerly .....	215	12"	Clay	
	204	10"	Clay	70.08
Pasadena ave., White street, southerly .....	156	12"	Clay	
	291	10"	Clay	258.61
Pasco st., I. O., Essex street, southerly .....	724	10"	Clay	607.80
Patton st., Garden brook to Main st. ....	214	10"	Clay	173.73
Garden brook, easterly ....	352	18"	Clay	
	349	15"	Clay	1,572.67
	537	12"	Clay	
Peabody lane, Willow street, westerly .....	292	10"	Clay	1,746.40
Pearl st., Chestnut to Spring st. ....	514	24"	Clay	332.17
	447	20"	Clay	1,792.62
Spring st., easterly .....	190	1'-6" cir.	Brick	96.16
				1,888.78

\*Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Pease st. Catharine to Bowles	250	12"	Clay	
Pecousic ave., Mill river to Main st.....	352	2'-8"x4'-0"	Con.	
Penacook ave., Governor st to Home st.....	106	12"	Clay	
Pendleton ave. Walnut st. to Hancock st.....	287 524 429	18" 15" 12"	Cem. Cem. Cem.	\$1,66
Hancock st. to Eastern ave.	600 793	18" 15"	Cem. Cem.	1,49
Phoenix st., Liberty street, easterly.....	236 250 89	18" 15" 10"	Clay Clay Clay	
Pine street. Mill to Cedar st.	740 1,529 500	2'-6"x3'-9" 3'-6"x5'-3" 3'-10"x5'-9"	Brick Brick Brick	13,65
Cedar to Walnut st.....	62 884 631	18" 15" 12"	Cem. Cem. Cem.	1,78
Pine st., I. O., Main st., east- erly.....	1,896	24"	Clay	
Pine st. court, Pine st., east- erly.....	348	10"	Cem.	
Pineywoods ave., Washing- ton ave., northeasterly..	334 263	15" 12"	Clay Clay	
Magnolia terrace, westerly	350	10"	Clay	2
Magnolia terrace to Wash- ington road.....	343 404	20" 12"	Clay Clay	
Washington road to Forest Park ave.....	341	12"	Clay	
Plainfield st., Sargeant st. to Fulton st. ....	414 537 456 244	18" 15" 12" 10"	Clay Clay Clay Clay	2,52
Washburn st. to West st.,...	154 203	12" 10"	Clay Clay	42
Washburn to Roseland st.,...	331 303 287	2'-8"x4' 0" 2'-6"x3' 9" 2'-4"x3'-6"	Brick Brick Brick	1,55 2,36 4,51
Rowland st., southerly.....	294 648	2'-2"x3' 3" 2'-2"x3'-3"	Brick Con.	3,40
Rowland st. to Talcott ave..	288 299	24" 20"	Clay Clay	1,20
Talcott ave., northerly.....	216	10"	Clay	15

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in feet.	Size.	Material.	Cost.
Wason ave. to Demond ave.	304	24"	Clay	\$1,253.59
	249	20"	Clay	
	53	18"	Clay	
Pleasant st., Bay st., southerly	296	12"	Cem.	\$17,417.96
Plymouth st., Fulton st., east- erly .....	375	10"	Clay	249.74
Pomona st., Sumner avenue, northerly .....	580	12"	Clay	196.59
	297	10"	Clay	459.94
Portland st., Birnie ave., east- erly .....	251	12"	Clay	204.92
	224	10"	Clay	664.86
Portsmouth street .....	212	12"	Clay	351.35
Pratt street, Chestnut to Marvin street .....	350	15"	Clay	253.65
	299	12"	Clay	869.53
Prince st., King to Lebanon st. ....	329	12"	Cem.	333.15
Princeton st., Bay to Amherst street .....	103	18"	Cem.	289.08
	689	18"	Clay	724.15
	151	15"	Clay	177.72
Yale to Vassar st. ....	665	12"	Cem.	....
St. James ave. to Cornell st.	298	12"	Cem.	195.52
Private ways and private lands:				1,386.47
Armory Hill sewer from Ar- mory st., through private grounds east of Armory st. to Worthington st. ....	150	2'-5" x 3'-7 $\frac{1}{4}$ "	Brick	5,318.04
	900	2'-8" x 4'-0"	Brick	
	249	2'-1" x 3'-1 $\frac{1}{4}$ "	Brick	
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts in front and around High school .....	751	12"	Cem.	408.75
	492	24"	Clay	848.26
High school to State st.	88	24"	Clay	192.35
Cemetery brook Morris st., easterly, north of Central street .....	174	24"	Clay	1,449.36
Chester to Hancock street.	218	8"	Clay	569.59
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch street about 300 feet east of Main st. ....	2,936	5'-6" cir.	Brick	47,577.34
	766	5'-0" cir.	Brick	
	1,303	4'-6" cir.	Brick	
	236	3'-0" x 4'-6"	Brick	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Worthington st., northeast- erly to Lyman st., thence via Railroad land to Ar- mory st. ....	3,274 952	4'-7 $\frac{1}{2}$ " cir. 4'-1" cir.	Brick Brick	\$29.7
Hickory to Melrose street (see Melrose street)	....	18"	Clay	
Jefferson ave., passage way in rear of lots on south side.	135 518	2'-0" x 3'-0" 12"	Brick Cem.	3
Main to Dale st., between Hubbard ave. and Wil- liam street .....	655	12"	Cem.	
Passage way, Ferry to Liberty st., 80 ft. east of Main st.	210	12"	Clay	
Potter place, State st., north- erly .....	396 301 274	15" 12" 10"	Clay Clay Clay	
Sewer in ave. Hampden st., southerly, near Water st.	111	12"	Clay	
Springfield st. and Glen- wood, via Atwater Glen.	677 598 389 1,292 40 16 1,294	3'-6" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10" x 4'-3" 24"	Brick Brick Brick Brick Brick Brick Clay	14.6 3.8
Prospect st., Chestnut street, easterly .....	218 199 196	18" 15" 12"	Clay Clay Clay	
Pyncheon st. ....	950	2'-0" x 3'-0"	Brick	
Quebec st., I. O., Lyons st., easterly .....	209	15"	Clay	
Queen st., Walnut to Han- cock st. ....	634	12"	Cem.	6
Quincy st., Oak to Stebbins st.	860	12"	Cem.	5
Hancock to Stebbins st. ....	522	12"	Cem.	
Hancock to Eastern ave. ....	637 765	18" 15"	Cem. Cem.	1.7
Colton to Eastern ave. ....	208	10"	Clay	1
Railroad st. Water st. easterly	351	12"	Clay	
Randolph street, Maplewood terrace, easterly .....	250 251	12" 10"	Clay Clay	

SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Ranney street, Wilmont st., northerly .....	200	10"	Clay	\$151.76
Kensington ave., northerly	206	10"	Clay	149.18
				<hr/> \$300.94
Rapalus ave., I. O., Parker st. southerly .....	442	12"	Clay	429.47
Raymond ave., Carew street, northerly .....	277	10"	Clay	217.32
Reed st., State st., southerly	219	12"	Clay	134.79
	309	10"	Clay	
Revere st., White st. southerly	750	20"	Clay	
	250	10"	Clay	23.32
	209	8"	Clay	
Richelieu court, Adams st., southerly .....	160	12"	Clay	525.44
	315	10"	Clay	
Richelieu place, Richelieu court, easterly .....	100	8"	Clay	....
Ridgewood place, Mulberry st., northerly .....	400	12"	Clay	29.46
	76	10"	Clay	101.95
Ridgewood ter., Mulberry st., westerly .....	226	10"	Clay	131.41
Union st. southerly .....	137	10"	Clay	118.83
				<hr/> 118.83
Rimmon ave., Green lane to Weaver Ramble .....	859	18"	Clay	....
Weaver Ramble, northerly	200	12"	Clay	....
Ringgold st., North to Chest- nut st. ....	117	18"	Cem. }	744.53
	632	12"	Cem. }	
Ripley place, St. James ave., southerly .....	230	10"	Cem.	163.48
Riverview st., Riverview ter- race to Chase ave. ....	63	10"	Clay	.....
	310	10"	Clay	354.50
Forest Park ave., southerly.	299	10"	Clay	239.39
				<hr/> 593.89
Riverview ter., Fort Pleas- ant ave., easterly .....	298	15"	Clay	....
	322	12"	Clay	
	105	10"	Clay	
Rochelle st., Wilbraham road southerly .....	424	18"	Clay	452.68
Rogers ave., I. O., Main st., southerly .....	97	15"	Clay	312.13
	152	12"	Clay	
Roseland st. Plainfield street, westerly .....	350	18"	Clay	
	350	15"	Clay	1,352.31
	173	12"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
Rowland st., Conn. river to North Main st., including 630' in Douglas st.....	579 51 1,247 1,330	3'-3" cir. 1'-8"x2'-6" 6'-6" cir. 6'-0" cir.	Brick Brick Brick Brick	
Rutland ave., Wilbraham road to State st.....	199	8"	Clay	
Rutledge ave., Main street, easterly.....	574	24"	Clay	
Sachem st., Dickinson st., northerly.....	330	10"	Clay	
Salem st., Pearl st., south and east.....	283 99 290	18" 15" 12"	Cem. Cem. Cem.	
*Sanford st.....	536	3'-2"x4'-9"	Brick	
*Sargeant st., Fulton to Main (cost shown under Clinton street).....	920	4'-6"x6'-9"	Brick	
School st., Union to Mulberry street.....	549	15"	Clay	\$620.
Union st., northerly.....	262	10"	Clay	204.
Scott st., White st. to Po- mona st.....	300 347	12" 10"	Clay Clay	
Searle place, Walnut street, easterly.....	178	10"	Clay	
Seventh st., Fulton to Main st Sewer in avenue (see private ways)	830	12"	Cem.	
Sewer (see private ways).				
Sharon st., Garden brook to Main st.....	360	15"	Cem.	762.
Garden brook, easterly.....	601 463	18" 12"	Cem. Cem.	1,273.
Shattuck ave., Maynard ave. to Willard ave.....	200 143	10" 8"	Clay Clay	
Willard ave., easterly.....	50	8"	Clay	
Sheffield st., Springfield st., westerly.....	293 350	12" 10"	Clay Clay	
Sheldon st., Birnie ave., to N. Main st.....	311 317	12" 10"	Clay Clay	
Sherman st., Bay to Clarendon st.....	175	12"	Cem.	
Bay to McKnight st.....	443	12"	Cem.	571.1
State to McKnight st.....	301 301 544	18" 15" 12"	Clay Clay Clay	1,314.

\*Elliptical



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Silver st., Armory st., easterly.	302	15"	Clay	\$470.93
	297	12"	Clay	
Smith st., Knox to Dorne st.	199	12"	Clay	
Dorne st., westerly.....	107	10"	Clay	\$196.57
Sorrento ave., Summer ave., northerly .....	325	12"	Clay	136.68
Grenada terrace, northerly.	367	10"	Clay	271.15
				209.65
				480.80
Spring st., south from Lyman st.	281	15"	Cem.	2,530.32
	130	12"	Cem.	
Worthington to State st....	470	18"	Cem.	
	640	15"	Cem.	
	644	12"	Cem.	
Worthington st., northerly..	132	12"	Clay	87.28
Worthington to Summer st.	183	5'-0" cir.	Brick	1,498.24
* .....	49	4'-3"x6' 0"	Brick	
				4,115.84
Springfield st., Atwater ter- race, northerly .....	892	20"	Clay	3,337.44
	360	18"	Clay	
	413	15"	Clay	
	286	12"	Clay	
	437	10"	Clay	
Springfield st. and Glenwood (see private ways).				
Spruce street, Central street, northerly .....	600	12"	Cem.	558.03
Spruceland ave., Magnolia terrace, westerly .....	67	8"	Clay	....
Beechwood ave., easterly...	242	8"	Clay	136.48
Beechwood ave., westerly...	299	8"	Clay	94.83
Longhill street, easterly...	450	10"	Clay	410.40
Stafford st., Armory street, westerly .....	402	10"	Clay	641.71
State st., Water st., westerly	70	12"	Cem.	239.85
	91	12"	Cem.	45.27
	82	12"	Clay	71.19
	82	12"	Clay	83.01
Water st. to Main st.....	907	18"	Clay	1,199.78
Main to Dwight st.....	636	18"	Clay	1,433.50
†Dwight st. to High school...	29	2'-8"x4' 0"	Brick	4,897.66
	265	2'-2"x3' 3"	Brick	
	417	2'-0"x3' 0"	Brick	
At High school, connecting old with new .....	54	24"	Clay	161.88
High school to Elliott street	305	2'-0" cir.	Brick	469.65
High school to Walnut st.	726	2'-0"x3' 0"	Con.	6,442.79
	306	2'-2" cir.	Con.	
	1,440	2'-0" cir.	Con.	
connecting new with old...	54	18"	Clay	

\*Segmental.

†Elliptical

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	
outlet into High school sewer	169	15"	Clay	
Tenth street, Garden brook, easterly .....	300	18"	Clay	}
	302	15"	Clay	
	421	12"	Clay	
	4	8"	Clay	
Terrence st. Union to State st	374	12"	Clay	}
	313	10"	Clay	
	48	10"	Cem.	
Thomas st Birnie ave., easterly	451	10"	Clay	
Thompson st., Worthington st., southerly .....	603	12"	Cem.	
St. James ave. to Bay st....	703	15"	Cem.	
State to Bay st. ....	852	12"	Cem.	
Tracy avenue, Franklin street, southerly .....	14	10"	Clay	
	262	10"	Clay	
Trenton st., Dickinson st. to Commonwealth ave....	146	10"	Clay	
Tyler st., Oak to Hancock st.	717	15"	Cem.	}
	663	12"	Cem.	
	601	18"	Cem.	
Hancock to Eastern ave....	795	15"	Cem.	
Eastern ave., easterly ....	251	10"	Cem.	
Union st., submerged outlet.	165	24"	Wood	1,
	48	24"	C. Iron	
Conn. river to Main st. ....	1,610	3'-4' x 5'-0"	Brick	}
	53	2'-0" x 3'-0"	Brick	
Main st. to Oak st. ....	*718	3'-2" x 4'-9"	Con.	}
	951	2'-8' cir.	Con.	
	1,021	2'-3" cir.	Con.	
	1,504	2'-4" x 3'-6"	Con.	7,
Oak to Orleans st. ....	404	15"	Cem.	
Hancock to Stebbins st. ....	261	2'-0" x 3'-0"	Brick	}
	335	1'-10" x 2'-9"	Brick	
Stebbins to Orleans st. ....	428	20"	Clay	
Hancock to Eastern ave....	600	18"	Cem.	}
	800	15"	Cem.	
Eastern ave., easterly .....	248	10"	Clay	
Vassar st., Harvard street, northerly .....	550	12"	Cem.	
Ventura st., Sumner avenue, northerly .....	351	10"	Clay	
Grenada terrace, northerly.	341	10"	Clay	
Vermont st., Converse st. to Pomona st. ....	258	15"	Clay	}
	267	12"	Clay	
	225	10"	Clay	

\*Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Vernon st., Water st., easterly	689	15"	Cem.	\$837.92
Main st., westerly .....	216	12"	Cem.	310.68
				<u>\$1,148.60</u>
Vine st., Main to Fulton st.	697	12"	Cem.	688.75
Vinton st. Liberty to Franklin	357	12"	Clay	357.63
st .....	262	10"	Clay	252.13
				<u>609.76</u>
Walden st., Dickinson street, easterly .....	166	8"	Clay	94.93
Commonwealth ave., to Bel- mont ave .....	296	10"	Clay	148.67
Walker st., Water st., west- erly .....	650	12"	Clay	<u>243.60</u>
				688.37
Walnut st south from State st.	69	1'-6" x 1'-8"	Brick	85.23
north from Charter ave ..	292	10"	Clay	418.30
Union to Charter ave .....	279	12"	Cem.	482.50
Union to Oak st. ....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st. ....	1,142	2'-0" x 3'-0"	Brick	4,956.57
Pine to Oak st. ....	272	18"	Cem.	410.04
Hancock to Cedar st. ....	784	15"	Cem. }	1,269.67
Hancock st., southerly ....	180	12"	Cem. }	
North from Manhattan st. .	249	10"	Clay	212.35
Florence st., northerly ....	53	8"	Cem.	27.12
Hickory to Florence st. ....	1,026	12"	Clay	992.67
				<u>9,667.59</u>
Walter st., Birnie ave. to No. Main st. ....	385	12"	Clay	422.74
Waltham ave., Wilbraham road, southerly .....	911	12"	Clay	928.30
Wareham st., Grand avenue, southerly .....	419	10"	Clay	21.24
Warner place, Fort Pleasant ave. to Longhill st. ....	508	12"	Clay }	
	198	10"	Clay }	....
	89	10"	Clay	51.88
				<u>51.88</u>
Warriner ave., Locust street easterly .....	448	12"	Clay	418.39
Washburn st., Conn. river to B. & M. R. R. ....	1,758	7'-0" cir.	Brick	21,678.46
Washington boulevard, Longhill st. to Piney- woods ave. ....	304	2'-4" x 3'-6"	Brick }	5,032.68
	823	2'-2" x 3'-3"	Brick }	
	308	18"	Clay }	
	200	15"	Clay }	868.79
	242	12"	Clay }	
	330	10"	Clay }	<u>5,901.47</u>



## SEWER SYSTEM.—CONCLUDED.

NAME OF SEWER.	Length of Feet.	Size.	Material.	Cost.
Worthington st., submerged outlet .....	194	24"	Wood	\$1,883.04
	22	24"	C. Iron	176.25
*Conn. river to Main st....	1,038	5'-7"x7'-0"	Brick	33,410.12
*Main to Dwight st. ....	821	5'-4"x7'-0"	Brick	
Dwight to Garden brook ..	566	4'-0"x6'-0"	Brick	
Garden brook to Spring st..	738	4'-3" cir.	Brick	4,361.35
Spring st., branch north....	35	5'-0" cir.	Brick	
Spring st., branch south....	47	2'-0"x3'-0"	Brick	
Spring street, easterly .....	40	18"	Cem.	614.35
	242	15"	Cem.	
	251	12"	Cem.	
Autumn st., westerly .....	113	12"	Cem.	118.78
near Sacketts ave. ....	145	10"	Cem.	111.47
West brook, easterly.....	329	15"	Clay	1,110.54
	217	12"	Clay	
West brook to Autumn st..	231	15"	Clay	
Sacketts ave., westerly. ....	98	12"	Clay	727.56
Sacketts ave. to Kibbe ave..	387	12"	Cem.	207.28
Kibbe ave. to Federal st....	794	15"	Cem.	335.37
Kibbe hollow, westerly to Magazine street.....	167	18"	Clay	826.90
Kibbe hollow to Bowdoin st.	833	2'-2" cir.	Con.	381.28
near Magazine to Bowdoin st.	248	2'-8"x4'-0"	Brick	2,357.86
	354	2'-1"x3'-11"	Brick	20,646.21
Bowdoin st. to St. James ave.	359	3'-4"x7'-2"	Brick	
	1,307	3'-4"x6'-9"	Brick	
				\$67,268.36
X Court, Dickinson st., westerly and southerly...	34	10"	Clay	84.24
	192	10"	Clay	19.05
				103.29
Yale st., Dartmouth to Princeton st.....	350	24"	Clay	1,770.13
	359	18"	Clay	
	233	15"	Clay	
Princeton st., northerly....	712	12"	Clay	452.46
				2,222.59
York st .....	1,203	7'-0" cir.	Brick	13,912.27
Total .....	646,464			\$1,504,532.65

\*Elliptical.

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.

## GENERAL CLASSIFICATION, 1910

	Feet
Brick and cement mortar . . . . .	138,57
Brick-concrete . . . . .	66
Concrete . . . . .	19,30
Clay pipe . . . . .	359,97
Cement pipe . . . . .	126,79
Cast-iron pipe . . . . .	14
Wood pipe . . . . .	1,01
Total . . . . .	646,46

## SUMMARY OF SEWERAGE STATISTICS

(In form recommended by Sanitary Section of Boston  
Civil Engineers.)

*For the Year Ending December 1, 1910.*

## SPRINGFIELD, MASSACHUSETTS.

## GENERAL.

Population by census of 1910,.....	
Total area of city or town,.....	38 sq
Area served by sewerage system,.....	8 sq
Collection system, {	For sewage only,..... 1.28
{	For sewage and surface water, 120.99
{	For surface water only,..... 0.52
Method of disposal,—Gravity flow to Connecticut River.	

# COLLECTION.

## MAINS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS).

	For sewage only.	For sewage and surface water.	For surface water only.
2. Lineal feet brick,.....		138,570	
3. " " concrete, .....		19,961	
4. " " pipe, .....	6,754	478,421	2,758
5. " " pipe extended during year, 720		16,350	
6. Number of inverted siphons,.....		1	
8. Method of flushing: By connections with the water system and one auto- matic flush tank.			
9. Method of cleaning: By scrapers and flushing.			
10. Number of automatic flushing tanks, ..		1	
11. Number of direct connections with water mains for flushing,.....	5	469	
12. Number of flushings of entire system during year, .....		26	
13. Cost of flushing, per mile,.....		\$17.32	
14. Cost of cleaning, per mile,.....		\$16.78	
17. Number of storm overflows,.....		16	
18. Method of ventilation: By man-holes and well holes and through house stacks, .....			

## HOUSE CONNECTIONS.

1. By whom made:	By Sewer Department as far as street line.
2. Sizes, .....	6" and 8"
3. Number made during year,.....	513
4. Lineal feet laid during year,.....	About 12,825
7. Average cost per foot, connections made during year,	\$0.40

*Report on Sewers.***FINANCIAL.****CONSTRUCTION.**

<b>RECEIPTS.</b>	<b>EXPENDITURE</b>
Balance of previous year, \$. . . . .	Collection works:—
Bonds issued, . . . . .	(a) Mains, . . . . .
Appropriations, . . . . . 42,000.00	(b) House connections, . . . . .
Entrance fees, . . . . . 18,019.53	
House connections, . . . . . 6,786.60	
By bills rendered, . . . . . 1,168.20	

**MAINTENANCE AND OPERATION.**

Balance of previous year, \$. . . . .	Administration, . . . . .
	Tools and supplies, . . . . .
	materials, . . . . .
Appropriation, . . . . .	Repairs, . . . . .
	Automobile, Teams, C
	Yard and engineeri
Assessments, . . . . .	Cleaning sewers, . . . . .
Rentals, . . . . .	Cleaning catch basins
Other sources, . . . . .	Flushing sewers, . . . . .
	Work chargeable, . . . . .
	Unclassified expenses,
	Transfer to other dep
	ments, . . . . .
	Balance, . . . . .
Total, . . . . . \$67,974.33	
	Amount paid in inter
	1910, . . . . .

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\*Paid from Street Department funds.



**GENERAL.**

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Total cost of collecting mains to date,.....	\$1,504,532.65
Bonded debt at date,.....	251,000.00
Value of sinking fund at date,.....	40,666.00
Average rate of interest on bonds,.....	3½%
Proportion of cost of system paid for by abutters in fees,	25%+

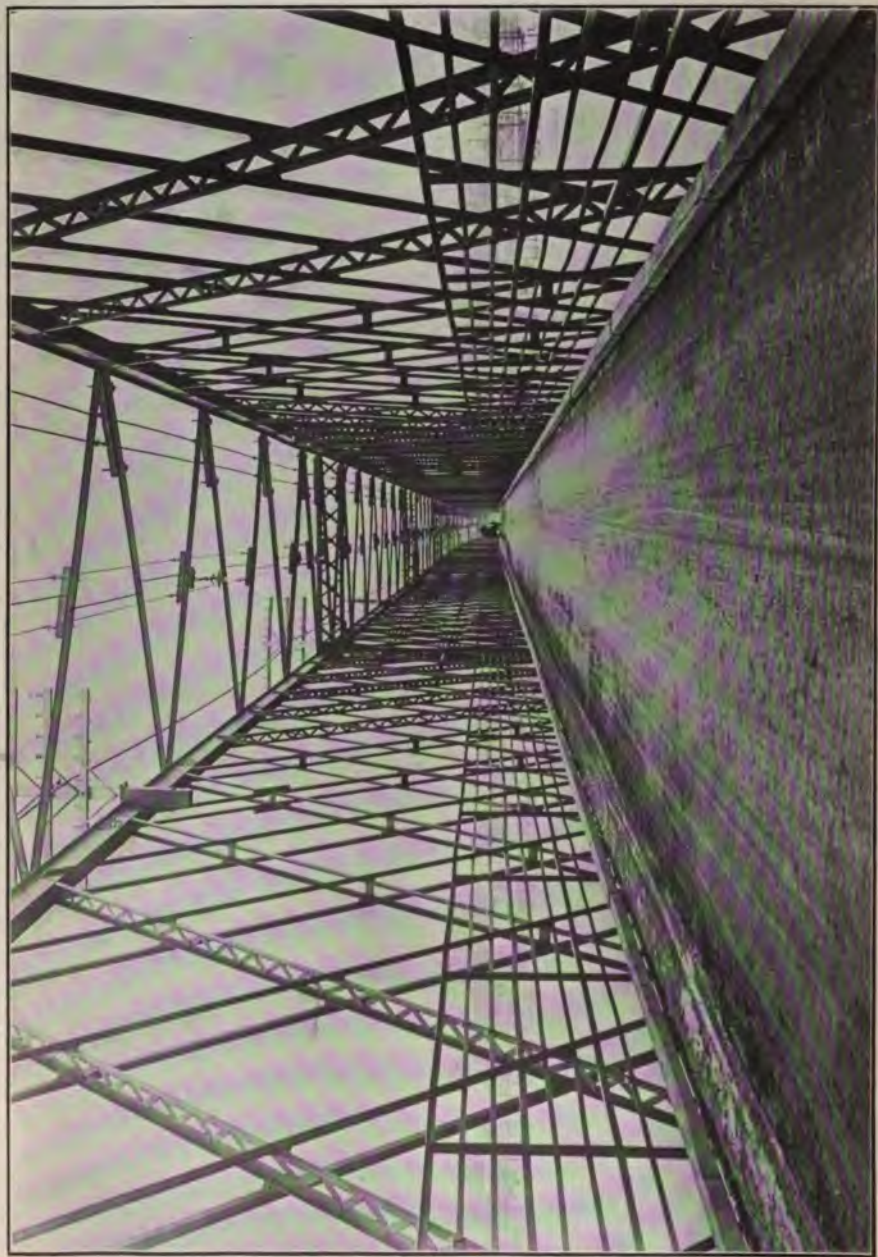
**Methods of assessing abutters and rate of assessment:—**

Entrance fee of \$25 per tenement on ground floor for dwellings.

For business blocks one story in height, one (1) cent per square foot of area covered by building, and for business blocks two or more stories in height one and three-fourths (1¾) cents per square foot of area covered by the building.







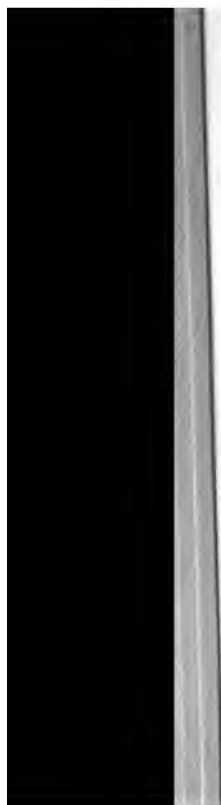
NEW CREOSOTED PINE FLOORING, UNDER FLOOR AND PAVING BLOCKS

**Annual Report**  
**Superintendent of Streets**  
**and Sewers**

**Springfield, Massachusetts**



**For the Year 1911**



FORTY-THIRD ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

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SPRINGFIELD, MASS., December 28, 1911.

*To the City Council:—*

In accordance with the requirements of Chapter 19, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department and descriptions of work done during the fiscal year ending December 1, 1911.

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FINANCES IN GENERAL.

REGULAR ACCOUNTS.

RECEIPTS.

Highways and Bridges,	.	.	.	.	\$295,575 62	
Walks and Curbing,	.	.	.	.	32,393 87	
Watering Streets,	.	.	.	.	40,568 67	
Ashes Collection,	.	.	.	.	49,733 05	
Garbage Collection,	.	.	.	.	22,533 99	
					<hr/>	\$440,805 20

EXPENDITURES.

Highways and Bridges,	.	.	.	.	\$282,883 31	
Walks and Curbing,	.	.	.	.	30,536 06	
Watering Streets,	.	.	.	.	39,433 06	
Ashes Collection,	.	.	.	.	48,144 65	
Garbage Collection,	.	.	.	.	21,678 94	
					<hr/>	\$422,676 02

*Report on Streets.*

## UNEXPENDED BALANCES.

Highways and Bridges, . . . . .	\$12,692 31
Walks and Curbing, . . . . .	1,857 81
Watering Streets, . . . . .	1,135 61
Ashes Collection, . . . . .	1,588 40
Garbage Collection, . . . . .	855 05
	<hr/>

## SPECIAL ACCOUNTS.

## COURT STREET PAVING.

Limit of expenditures, . . . . .	\$7,000 00
Transfer from Contingent Account, . . . . .	49
	<hr/>
Expenditures, . . . . .	

## LOCUST STREET LAYOUT.

Limit of expenditures, . . . . .	\$31,634 00
Expenditures, . . . . .	17,091 50
	<hr/>
Unexpended balance, . . . . .	

## NORTH STREET EXTENSION.

Limit of expenditures, . . . . .	\$233,280 37
Expenditures, . . . . .	233,054 18
	<hr/>
Unexpended balance, . . . . .	

## PECOUSIC AVENUE. RELOCATION AND IMPROVEMENT

Limit of expenditures, . . . . .	\$32,117 00
Expenditures, . . . . .	26,607 17
	<hr/>
Unexpended balance, . . . . .	



WORK IN GENERAL.

Streets, . . .	{	Grading and graveling, . . .	2,090 feet
		Gravel resurfacing, . . .	7,600 feet
		Macadamizing, . . .	21,867 feet
		Macadam resurfacing, . . .	5,564 feet
		Asphalt resurfacing, . . .	635 sq. yards
		Bitulithic paving, . . .	2,871 feet
		Bitulithic paving skim coat, . . .	6,835 sq. yards
		Wood block paving, . . .	1,312 feet
Street cleaning,	{	Gravel, . . .	12.41 miles
		Macadam, . . .	74.13 miles
		Paving, . . .	12.24 miles
Sidewalks, . . .	{	Brick (new), . . .	5,133 feet
		Brick (relaid), . . .	3,635 feet
		Cement concrete (new), . . .	3,973 feet
		Tar concrete (new), . . .	823 feet
		Tar concrete (resurfaced), . . .	1,169 feet
Curbing, . . .	{	Set, . . .	15,393 feet
		Reset, . . .	11,163 feet
Crosswalks—new,			51
Streets watered,			95.87 miles
Ashes collected,			29,697 loads
Garbage collected,			1,837 cords

## FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

Appropriation, . . . . .	\$214,500 00	
Springfield Street Railway Company,		
Corporation tax, . . . . .	25,943 88	
Excise tax, . . . . .	14,671 37	
Bills rendered departments and private parties,	37,043 37	
Transfer from North Street Extension, .	2,000 00	
Licenses for occupying and opening streets, .	1,417 00	
		<hr/> \$295,571

## EXPENDITURES.

Automobiles, repairs and supplies, . . .	\$1,342 98
Bridges, repairs and care, . . . . .	2,838 63
City teams, uncredited, . . . . .	157 46
City yard, Logan street, . . . . .	91 66
City yard, Summer street, . . . . .	3,991 79
Engineering, . . . . .	574 85
Foremen's winter and holiday pay, . . .	1,802 94
Land damages, . . . . .	1,528 56
Material used, macadamizing 1910, . . .	2,336 38
Material used, paving 1910, . . . . .	1,294 54
Material, wood blocks and lumber for South End Bridge and lumber for North End Bridge to be used in 1912, . . . . .	9,963 59
Material uncredited, . . . . .	5,116 98
Office and general expenses, . . . . .	4,419 38
Salary of superintendent, . . . . .	1,458 35
Salary of assistant superintendent, part, .	1,547 40
Street construction, {	
Grading and graveling, . . . . .	953 70
Macadamizing, . . . . .	37,464 64
Paving, balance of contract 1910, . . . . .	10,789 78
Paving, . . . . .	39,592 66

Street maintenance,	Cleaning, . . . . .	\$42,704 14	
	Cleaning equipment, . . . . .	1,499 88	
	General repairs, . . . . .	31,687 83	
	Gravel resurfacing, . . . . .	1,589 23	
	Macadam resurfacing, . . . . .	11,081 15	
	Paving resurfacing, . . . . .	5,125 99	
	Winter expense, . . . . .	20,218 49	
Tools and supplies, . . . . .		3,913 29	
Work and material charged to departments, . . . . .		16,711 14	
Work and material charged to private parties, . . . . .		19,585 90	
		\$281,383 31	
Transferred to Walks and Curbing, . . . . .		1,500 00	
		\$282,883 31	
Unexpended balance, . . . . .		12,692 31	
			\$295,575 62

## BILLS RECEIVABLE.

Bills receivable November 30, 1910, . . . . .	\$4,106 13	
Bills committed, fiscal year 1911, . . . . .	31,797 49	
Bills committed from Locust Street Layout, . . . . .	10,000 00	
		\$45,903 62
Bills paid, fiscal year 1911, . . . . .	\$35,021 54	
Abatements, . . . . .	62 19	
		35,083 73
Bills receivable November 30, 1911, . . . . .	\$819 89	
Bills receivable November 30, 1911, Locust Street Layout, . . . . .	10,000 00	
		\$10,819 89

## WALKS AND CURBING.

## RECEIPTS.

Appropriation, . . . . .	\$15,000 00	
Bills rendered abutters for work done pre- vious to 1911, . . . . .	8,073 87	
Bills rendered abutters for work done during 1911, . . . . .	7,820 00	
Transfer from Highways and Bridges, . . . . .	1,500 00	
		\$32,393 87

**EXPENDITURES.**

Crosswalks, new and relaid, . . . .	\$4,897 53
Curbing, set and reset, . . . .	5,921 53
Engineering, . . . .	481 43
Foremen's winter and holiday pay, . .	93 49
Office and general expenses, . . . .	237 96
Material and tools, . . . .	96 39
Salary of assistant superintendent, part, .	588 43
Sidewalks, maintenance, charged city, .	1,103 59
Sidewalks, construction, charged city, .	867 69
Work and material charged to departments, .	1,828 51
Work and material charged to abutters, .	14,419 51
	<hr/>
	\$30,536 06
Unexpended balance, . . . .	1,857 81
	<hr/>

**BILLS RECEIVABLE.**

Bills unpaid November 30, 1910, . .	\$2,660 52
Bills committed, fiscal year 1911, . .	19,037 22
	<hr/>
Bills paid, fiscal year 1911, . . . .	\$15,894 87
Abatements, . . . .	1,091 93
	<hr/>

Bills receivable November 30, 1911,

**WATERING STREETS.****RECEIPTS.**

Appropriation, . . . .	\$8,400 00
Watering streets assessments, . . . .	29,682 99
Springfield Street Railway Company, by agreement, . . . .	2,306 65
Bills rendered, use of teams and oil sold, .	179 03
	<hr/>

**EXPENDITURES.**

General expense, . . . .	\$367 93
Standpipes and car hydrants, construction, maintenance, opening, and closing, . .	1,601 13
Standpipe bases,—construction and maintenance, . . . .	10 08

# Report on Streets.

9

Carts, storage, painting, and repairs, . . .	\$757 46	
Use of teams as per pay roll, . . .	6,543 07	
Use of teams as per contract, . . .	2,418 75	
American Car Sprinkler Company, as per contract, . . . . .	8,360 00	
Inspector, . . . . .	1,075 70	
Inspector's horse and carriage, . . .	319 02	
Tools and materials, . . . . .	1 40	
Dust laying materials and labor, . . .	16,026 90	
Oil tanks, . . . . .	1,507 32	
Private parties, use of teams, sale of oil, .	458 73	
	<hr/>	
	\$39,447 49	
City teams credited, . . . . .	14 43	
	<hr/>	
	\$39,433 06	
Unexpended balance, . . . . .	1,135 61	
	<hr/>	
		\$40,568 67

## ASHES COLLECTION.

### RECEIPTS.

Appropriation, . . . . .	\$49,300 00	
Sundry receipts, . . . . .	433 05	
	<hr/>	
		\$49,733 05

### EXPENDITURES.

Pay rolls, . . . . .	\$43,732 33	
Contracts, . . . . .	890 67	
Provender, . . . . .	1,977 98	
Shoeing, veterinary, and miscellaneous, .	528 40	
Wagon, sleigh, harness, and repairs, . .	873 72	
Tools and supplies, . . . . .	52 47	
Telephone and lighting, . . . . .	26 20	
South End barn, repairs, . . . . .	31 88	
Covers, . . . . .	31 00	
	<hr/>	
	\$48,144 65	
Unexpended balance, . . . . .	1,588 40	
	<hr/>	
		\$49,733 05

## GARBAGE COLLECTION.

## RECEIPTS.

Appropriation, . . . . .	\$18,500 00	
Garbage sold, . . . . .	3,906 74	
Sundry receipts, . . . . .	127 25	
	<hr/>	\$22,533

## EXPENDITURES.

Pay roll, . . . . .	\$16,608 34	
Provender, . . . . .	2,884 94	
Shoeing, veterinary, and miscellaneous, . . . . .	499 78	
Barn repairs, . . . . .	414 95	
Wagon, sleigh, harness, and repairs, . . . . .	731 57	
Tools and supplies, . . . . .	127 42	
Covers, . . . . .	59 85	
Pair of mules, . . . . .	300 00	
Telephone and lighting, . . . . .	51 19	
General expense, . . . . .	90	
	<hr/>	\$21,678 94
Unexpended balance, . . . . .	855 05	\$22,533

## COURT STREET PAVING.

Limit of expenditures, . . . . .	\$7,000 00	
Transferred from Contingent Account, . . . . .	49	
	<hr/>	\$7,000
Expenditures, . . . . .		\$7,000

## LOCUST STREET LAYOUT.

Limit of expenditure, . . . . .	\$31,634
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## EXPENDITURES.

Engineering, inspection, etc., . . . . .	\$1,426 62	
T. J. Hynes & Son, contract for bridge, . . . . .	3,789 38	
Fred T. Ley & Co., contract Locust street extension, . . . . .	11,875 50	
	<hr/>	\$17,091 50
Unexpended balance, . . . . .	14,542 50	\$31,634

**NORTH STREET EXTENSION.**

Limit of expenditures previously reported, . . . . .	\$225,674 37	
Receipts (sale of land), . . . . .	7,606 00	
	<hr/>	\$233,280 37

**EXPENDITURES.**

Previously reported, . . . . .	\$201,265 33	
Land, . . . . .	625 00	
Macadamizing, . . . . .	6,621 67	
Miscellaneous, . . . . .	542 18	
	<hr/>	\$209,054 18
Transferred, . . . . .	24,000 00	
	<hr/>	\$233,054 18
Unexpended balance, . . . . .	226 19	
	<hr/>	\$233,280 37

**PECOUSIC AVENUE, RELOCATION AND IMPROVEMENTS.**

Limit of expenditure previously reported, . . . . .	\$32,117 00
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**EXPENDITURES.**

Previously reported, . . . . .	\$25,687 52	
Land taken, . . . . .	693 00	
Miscellaneous, . . . . .	226 65	
	<hr/>	\$26,607 17
Unexpended balance, . . . . .	5,509 83	
	<hr/>	\$32,117 00

## WORK ITEMIZED.

## BRIDGES.

## REPAIRS AND CARE.

	Description of Work.	Cost.
Abbe avenue overhead crossing,	General and railing repairs,	\$54 63
Armory street over B. & A. Railroad,	Floor repairs,	153 36
Armory street over N. Y., N. H., & H. Railroad,	Floor repairs,	117 39
Berkshire street, Red House crossing,	Floor repairs,	97 43
Main street, I. O.,	Floor repairs,	53 23
North end, over Conn. River,	Floor repairs and cleaning,	885 84
Old Toll,	Floor repairs and care,	472 16
Plainfield street,	Floor repairs,	257 54
South end, over Conn. River, and N. Y., N. H., & H. Railroad,	Floor repairs,	378 73
St. James avenue,	Floor repairs,	345 09
Sundry,	Small repairs,	23 23
		<hr/> \$2,838 63



STREET CONSTRUCTION.  
GRADING AND GRAVELING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Kensington avenue, Peconic avenue, Summer avenue, Wellington street, Wilmont street,	Oakland street easterly, just north of Mill River (grading), just east of railroad (grading), Wilbraham road southerly, Ranney street westerly,	1,200	4,000	\$0 04	\$154 82
		690	2,300	06	388 06
		200	737	11	231 57
		2,090	7,037		145 87
					83 38
					\$953 70

## Report on Streets.

## STREET CONSTRUCTION.

## MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Alfred street,		490	1,685	\$0 47	\$767 09
Berkeley street,		453	1,510	537	810 83
Bowdoin street,	Worthington street to Ingersoll grove,	792	2,640	536	1,414 46
Buckingham place,		275	916	585	585 76
Buckingham street,		2,006	6,678	53	3,543 16
Cherryvale avenue,		687	2,290	607	1,390 72
Chestnut street,	west side Jefferson avenue to Springfield street,	1,665	3,250	784	2,547 17
Cumberland street,	grading for macadam,				161 05
Florentine gardens,		706	3,501	547	1,914 27
Florida street,	Worthington street to Ingersoll grove,	735	2,202	518	1,140 67
Ingersoll grove,	Worthington street to Bowdoin street,	1,395	4,650	50	2,320 98
Magnolia terrace,	Spruceland street to Pineywoods avenue,	556	3,089	50	1,546 39
Marengo park,		1,869	6,230	498	3,105 37
Monmouth street,		1,168	4,000	498	1,991 16
Montmorenci street,		620	2,067	448	926 66

## STREET CONSTRUCTION.

MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Pineywoods avenue, Riverview street, Riverview terrace, St. James circle, Union street, Washington road, Westernview street, Westford avenue,	Washington road to Florentine gardens,  St. James avenue to Jennette avenue, School to Mulberry, Summer avenue to Pineywoods avenue,  Wilbraham road to north curb line Gunn square,	1,273 625 281 1,131 988 800 650  1,380 21,867	4,243 2,094 721 1,509 3,128 2,667 2,167  6,133 70,543	\$0 507 62 64 633 37 47 547  44	\$2,149 48 1,300 61 461 81 954 80 1,155 67 1,256 46 1,185 45  2,696 24 \$37,464 64

## STREET CONSTRUCTION.

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Bridge street,	Completion of work of 1910, Dwight to Chestnut,	Bitulithic,	252	895	\$2 58	\$1,968 41
Bridge street,	Extension westerly to Water street,					
*Court street,	Court Square avenue to Water street,	Bitulithic, Bitulithic.	617 311	2,699 1,385	2 69 2 64	2,294 37 7,274 57 8,625 91
Liberty street, North Main street,	Main street easterly, Bancroft to Calhoun, com- pletion of work of 1910,					
North Main street, Pyncheon street, State street,	Calhoun to Grove, Main to Water, Pleasant to Terrence, com- pletion of work of 1910,	Wood blocks, Bitulithic,	673 870	3,486 2,866	2 90 2 54	8,529 55 10,057 22 7,276 53
State street, Vernon street, Walnut street,	Terrence to Westminister, Main to Water, at Ashley street,	Wood blocks, Bitulithic, Bitulithic,	639 821	3,256 2,047	3 80 2 58	291 82 10,754 41 5,278 28 181 86

# STREET MAINTENANCE.

## GRAVEL RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Berkshire avenue,	State street to Red House crossing, northerly side,	7,600	10,248	\$0 155	\$1,589 23
		7,600	10,248	\$0 155	\$1,589 23

## STREET MAINTENANCE.

## MACADAM RESURFACING.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Boylston street, North Main street, State street,	Emery to Clinton, Wason avenue to Chicopee line (rebuilt), northerly side, City Library, easterly to Federal street,	303 1,026	748 3,938	\$0 56 69	\$418 88 2,721 24
Walnut street, West street, Worthington street,	westerly side, Hancock street southerly, Spring to Kibbe avenue (completion 1910 work),	2,740 300 1,195	7,834 400 3,872	347 37 588	2,722 33 147 84 2,268 09
		5,564	16,792		1,465 69
					<del>\$9,744</del> 07

# **STREET MAINTENANCE.**

## **PAVING RESURFACING.**

### **BITULITHIC SKIM COATING.**

Street.	Area in sq. yds.	Cost.
Maple street,	1,710.69	\$1,283 02
Market street,	801.93	601 45
North Chestnut street,	818.30	609 98
North Main street,	1,066.64	799 98
State street,	594.10	445 57
Taylor street,	202.03	151 52
Walnut street,	1,526.02	1,144 51
Worthington street,	119.94	89 96
	6,834.65	\$5,125 99

### **ASPHALT REPAIRS.**

Street.		Area in sq. yds.	Cost.
Bridge street,	Rock asphalt,	459.90	\$1,057 77
Court street,	Rock asphalt,	39.31	90 42
Elm street,	Rock asphalt,	43.71	100 53
Harrison avenue,	Trinidad asphalt,	88.20	202 86
Sanford street,	Rock asphalt,	3.94	9 06
		635.06	\$1,460 64

# STREET MAINTENANCE. GENERAL REPAIRS.

Street	Travel	Macadam.	Paving.	Receiving Basins.	Miscellaneous
Acushnet ave..				\$24 44	
Albany st..					\$601 00
Allen st..		\$116 42		3 92	
Alma st..	\$1,804 77				104 10
Arthur st..				39 85	
Arch st..		22 06			
Armory st..	287 45	101 59			11 10
Bancroft st..		1 44		62 10	
Bay rd..	101 53				
Bay st..	106 86	25 13			
Belmont ave..	74 72	53 00		191 52	16 10
Berkshire ave..					
I O..	300 49	13 04			50 10
Berkshire st., I. O..	278 51	38 49		36 95	73 10
Bircham Bend.	56 22				
Birnie ave..		96 90		9 13	1 10
Bliss st..		20 66			1 10
Boston rd..	1,867 04				5 10
Bowles st..	20 96	3 44			
Bridge st..			\$31 69		
Burr st..	21 43				
Cambridge st..	108 82				
Carew st..	109 01	103 44		66 15	12 10
Cass st..		37 56			
Center st..				21 64	
Central st..	3 00	45 45		113 84	
Chestnut st..		19 82	219 05		6 10
Clifton st..	26 66				
College st..	36 32				
Colonial ave..	26 51			7 27	
Colton st..	36 99				
Commonwealth ave..				52 30	
Concord terrace.	37 42				
Congress st..		9 65		17 54	
Cornell st..	25 11				
Court st..		29 79	7 30		
Cumberland st..				31 67	20 80



STREET MAINTENANCE.  
GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscellaneous.	Total Cost.
Dartmouth terrace,	\$82 70			\$37 15		\$119 85
Dawes st.,	136 98					136 98
Dickinson st.,	92 58	\$3 44		85 72	\$154 81	336 55
Dresden ave.,	37 36					37 36
Dwight st.,			\$1,779 87	98 69		1,878 56
Eastern ave.,		23 08				23 08
Edwards st.,		6 88		45 02		51 90
Elliott st.,				35 04		35 04
Emery st.,		68 36				68 36
Farnsworth st.,				34 31		34 31
Fiberloid st., I. O.,	30 26					30 26
Florence st.,	31 03					31 03
Fort st.,			60 16	63 17		123 33
Fort Pleasant ave.,		37 41		3 17		40 58
Franklin st.,		10 16		63 62		73 78
Fulton st.,		34 09	8 93	11 94	11 50	66 46
George st.,	25 77					25 77
Green st.,	47 77					47 77
Grenada terrace,				29 59		29 59
Grove st.,				21 42		21 42
Hamburg st.,		362 89		11 26		374 15
Hampden st.,			54 35			54 35
Hampden st., I. O.,	117 06					117 06
Hampshire st.,						
I. O.,	28 88					28 88
Hancock st.,	28 75	6 88		3 17		38 80
Harriet st.,					23 31	23 31
Harrison ave.,		120 87	3 84	2 83		127 54
Hawley st.,	33 98			18 15		52 13
Hickory st.,		208 59			5 47	214 06
Kensington ave.,	29 43					29 43
King st.,	30 75					30 75
Ledyard st.,	80 35					80 35
Liberty st.,	82 24	341 24	4 77	36 02	8 62	472 89
Locust st.,		126 25		3 23	37 70	167 18
Long Hill st.,	77 70	35 63			32 16	145 49
Lyman st.,			156 68	44 86		201 54
Magazine st.,		18 09		7 23		20 32

# STREET MAINTENANCE. GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscellaneous.
Main st.,		\$67 54	\$1,028 12	\$40 28	\$54 40
Main st., I. O.,	\$62 69	643 71		80 30	102 58
Maple st.,			44 17	17 98	
Margaret st.,		18 50		20 69	
Marion st.,	65 95				
Market st.,			38 05		
Mason st.,	108 60				
Massachusetts ave.,	65 00				
Massasoit st.,				45 54	
Maynard st.,	26 24				
Mill st.,		10 19			14 22
Mulberry st.,		6 51		24 50	
Myrtle st., I. O.,	106 17			6 66	
Noel ave.,				88 50	
North st.,		168 56		10 29	231 66
Northampton ave.,	189 36				
North Main st.,		779 77	84 60	7 92	6 94
Oak st.,		23 53			
Oak st., I. O.,	38 58	112 97			
Oak Grove ave.,	23 58			23 30	
Oakland st.,				62 33	
Orange st.,	45 98			19 74	
Parker st.,	1,404 79			12 53	23 30
Pasco st., I. O.,	65 76				137 00
Pecousic ave.,		200 41			117 24
Pine st.,	3 43			70 53	
Plainfield st.,		68 02	15 54	9 69	
Plumtree rd.,	59 75				40 50
Pyncheon st.,		55 06	1 33	6 12	
Queen st.,	69 97				
St. James ave.,	146 01	6 51		6 78	
Sanford st.,		36 14	1 33		
Shattuck st.,	13 68	7 48			
Sixteen Acre rd.,	466 55				13 50
Spring st.,		104 69			
State st.,		670 11	75 59	14 95	5 48
Sumner ave.,	347 26	23 07			
*Sundry sts.,	596 22	3,294 77	51 67	206 68	168 36

\*Individual street repairs costing less than \$20.00.

STREET MAINTENANCE.  
GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscel- laneous.	Total Cost.
Taylor st.,		\$37 97	\$61 14	\$14 84		\$118 95
Tinkham rd.,	\$30 36				\$37 96	118 32
Tyler st.,	46 47					46 47
Union st.,		52 40				52 40
Walnut st.,		48 44	74 61			123 05
Water st.,		415 50		42 30	9 56	467 36
Wellesley st.,	1 87			43 38		45 25
West st.,		22 18			24 71	46 84
Westford ave.,	119 07					119 07
White st.,	10 50	36 32	6 59			53 41
Wilbraham rd.,	1,765 24	143 83		212 32	234 22	2,355 11
William st.,	13 07	14 50				27 57
Willow st.,		54 76				54 76
Windsor st.,	28 82			15 20		44 02
Worcester st., I. O.,	428 36	172 32			36 70	637 38
Worthington st.,		209 67	62 16	11 36	3 01	286 20
	\$11,838 66	\$9,581 57	\$3,871 54	\$2,448 57	\$2,491 85	\$30,227 19

## SIDEWALKS AND CURBING.

## CONSTRUCTION AND RECONSTRUCTION.

By orders of the City Council.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet, 4"	Order Approved.
		Material.	Description.		
Abbe avenue,	820	Brick,	New,		Sept. 20, 1910.
Andrew street,	291	Tar concrete,	Skim coat,		Sept. 20, 1910.
Benton street,	1,000	Brick,	New,	2,061	July 13, 1911.
Boylston street,	585	Brick,	Relaid con- crete curb,		June 29, 1910.
Carew street,	470	Cement concrete,	New,	551	Nov. 15, 1910.
Cass street,	50	Brick,	New,		June 6, 1911.
Chestnut street,	115	Brick,	Relaid,		Nov. 28, 1910.
Dickinson street,				1,629	Sept. 20, 1910.
Foster street,	405	Brick,	New,	88	May 26, 1910.
Franklin street,	602	Brick,	New,		Sept. 27, 1910.
Hamburg street,	148	Tar concrete,	New,		June 29, 1910.
Hancock street,	225	Brick,	New,	752	July 12, 1910.
Hancock street,	138	Brick,	Relaid,		July 12, 1910.

## SIDEWALKS AND CURBING—Continued.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet. 4"	Order Approved.
		Material.	Description.		
Liberty street,	2,797	Brick,	Relaid, Granite, Concrete curb,	419 } 2,014 }	June 1, 1910.
North street extension,	1,929	Cement concrete,	New,		Sept. 2, 1910.
North street extension,	941	Cement concrete,	New,		July 13, 1911.
North Main street,	2,081	Brick,	New,	881	Sept. 20, 1910.
Orchard street,	54	Tar concrete,	Skim coat,	2,083	Oct. 13, 1910.
State street,	383	Cement concrete,	New,		June 6, 1911.
Sumner avenue,	824 }		Skim coat, }		July 13, 1911.
Wilmont street,	675 }	Tar concrete,	New,		Aug. 8, 1911.
	14,733			8,544	
				3,865	

No sidewalk construction was ordered by abutters during the past fiscal year but 1,764 feet of four-inch curbing have been set by orders of abutters.

## STREETS MADE PUBLIC.

BY ORDER OF THE CITY COUNCIL.

Name.	Limits.	Length in feet.	Width in feet
Belmont place, Berendo street.	Belmont avenue southerly, Grenada terrace to Alder- man street,	215 370	16-20-
Birnie avenue exten- sion,	Arch street to Plainfield street,	839	
Genesee street,	Franklin street northerly,	219	
Ledyard street,	Armory street to Liberty street,	565	
Locust street exten- sion,	Belmont avenue to Dickin- son street,	2,415	
Mill street exten- sion,	Main street to Pecousic avenue,	588	
Orleans court,	Oak street to Orleans street,	338	
Sorrento street,	Sumner avenue to Alderman street,	870	
St. James circle,	St. James avenue to Jennette avenue,	1,131	
	1.429 miles.	7,550	

**STREETS RELOCATED AND WIDENED.**

**BY ORDER OF THE CITY COUNCIL.**

Name.	Limits.	Length in feet.	Width in feet.
Fulton street,	Plainfield street southerly,	227	40.5
Longhill street,	Edgeland avenue southerly,	364	66-74
Longhill street,	Cherryvale avenue southerly,	628	74
Main street and Longhill street,	both corners,	191	
Pecousic avenue and Main street,	both corners,	184	
		1,594	

**INVENTORY.****STREET AND SEWER DEPARTMENTS.****Lands.**

City yard, Logan street, . . . . .	\$8,50
City yard, Summer street, . . . . .	30,00
Gravel bank, Five Mile pond, . . . . .	10
Gravel bank, Boston road, . . . . .	7
Gravel bank, Island pond, . . . . .	35
Trap rock quarry, Westfield, . . . . .	25

**Buildings and structures.**

Barn, wagon house, and shed, . . . . .	16,04
Scales, . . . . .	31
Trap rock bins and trestle, . . . . .	9,00
Steam roller house, . . . . .	80

**Horses, wagons, etc.**

Three automobiles, . . . . .	2,20
Fifteen horses, . . . . .	2,57
Harness, blankets, etc., . . . . .	36
Fifteen wagons and carts, . . . . .	1,48
Ten sleighs, sleds, etc., . . . . .	40
Provender, . . . . .	1,40

**Special tools and machines.**

Horse rollers, . . . . .	15
Six steam rollers, . . . . .	8,00
Concrete mixer, . . . . .	90
Hoisting engine, . . . . .	60
Macadam scraper, . . . . .	16
Road machines, . . . . .	10
Scarifier, . . . . .	42
Sewer pumps and portable boiler, . . . . .	26
Street sweepers and cleaning equipment, . . . . .	1,75
Six wheel scrapers, . . . . .	11

**Street and sewer materials.**

Castings and patterns, . . . . .	54
Coal, oil, tanks, etc., . . . . .	10
Lumber, . . . . .	1,48
Lumber—contract for North and South End bridges, . . . . .	9,96
Sand and sand tickets, . . . . .	6
Trap rock, . . . . .	1,15



Paving, brick and wood blocks, . . . . .	\$3,336 00
Vitrified clay pipe, . . . . .	314 66
Street watering equipment.	
Twenty-four wagons, . . . . .	4,395 00
Two tanks for road oil, . . . . .	1,507 32
Tools and supplies,—miscellaneous.	
Lanterns and globes, etc., . . . . .	98 90
Machine shop stock and tools, . . . . .	1,025 00
Sidewalk materials and tools, . . . . .	2,660 65
Miscellaneous materials and tools, . . . . .	3,117 91
Office furniture and equipment, . . . . .	616 00
	<hr/>
	\$116,675 89

ASHES AND GARBAGE COLLECTION.

Land and buildings.	
State street, land and buildings, . . . . .	\$6,000 00
South End barn, . . . . .	800 00
Horses, wagons, etc.	
Twenty-three horses, . . . . .	2,700 00
Two mules, . . . . .	300 00
Twenty-one wagons, . . . . .	2,280 00
Seventeen sleighs, . . . . .	1,300 00
Harness, blankets, etc., . . . . .	470 00
Provender, . . . . .	931 00
Tools and supplies.	
Fifty-two ash carriers, . . . . .	52 00
Fifty-seven garbage pails, . . . . .	88 25
Twenty wagon covers, . . . . .	48 00
Small tools, . . . . .	50 00
	<hr/>
	\$15,019 25

GENERAL DESCRIPTIONS.

Attention is called to tables in this report showing costs of the work done by the Department during the past fiscal year in maintenance and construction of streets, street cleaning, watering streets or dust laying, sidewalk construction and repairs, and the collection of ashes and garbage. The expenditures of

above mentioned accounts, together with costs of construction under special accounts, amount to \$455.47

#### ORDERS OF THE CITY COUNCIL.

In accordance with the revised ordinances of Springfield, Section 3, Chapter 19, as amended July 1901, the Board of Public Works has been advised of the order of the City Council, relating to street acceptances and grade and alignment of streets, which have been called for as follows:—

North street, Liberty to Carew, completion of construction;  
Wilmont street, at corner of Dickinson street, relaid;  
Locust street, from Belmont avenue to Dickinson street, relaid;  
out and established (construction under contract);  
St. James Circle, laid out and established.  
feet through center of roadway has been macadamized.

#### MACADAM.

A total of \$37,464.64 has been expended for new macadam construction. All of our macadam streets constructed during the season have been built on the water-bound construction. This, I think, should be discontinued and some form of mineral binder used. While the cost would be more, the benefit derived would be far greater, as it would get rid of all mud and greatly reduce the amount of wear on a surface which has the appearance of asphalt, and last for a number of years.

During the ensuing year an additional number of streets should be replaced by macadam.

#### TAR AND ASPHALT SURFACING.

The treatment of macadam streets with tar and asphalt, started three years ago, has not been continued this year.

should be done, as it adds greatly to the life and durability of the street.

#### PAVING.

A number of streets in the center of the city have been paved during this year. Pyncheon street; Court street from Court Square to Water street; Vernon street; Bridge street from the end of the bitulithic to Water street; and Liberty street from Main street to the depot entrance have been paved with bitulithic. This will reduce the amount of dirt carried on to Main street every day by traffic and greatly improve the appearance of these streets, which can now be swept and kept in a clean condition.

The wood block paving has been extended on North Main street from Calhoun to Grove street, and the paving should be extended still further on this street. In the paving of State street, this season, a somewhat new plan was adopted in that the wood blocks were laid from the track to the curbing only, not including the space between the tracks. This paving should be extended to the bitulithic at Sherman street.

The Street Railway Company having double-tracked Belmont avenue hill, this Department has laid granite blocks between, and eighteen inches outside, the tracks of that Company, this being done at the expense of the Street Railway Company. This same style of paving, I believe, should be extended to the curbing during the coming year, thus completing a permanent and desirable paving for Belmont avenue hill.

There are a number of streets in the city where the travel is too heavy for macadam, which should be replaced with permanent paving. The amount of \$57,382.93 was expended for permanent paving this year.

#### BRIDGES.

During this season small repairs have been made to the Old

**Toll Bridge.** It will be necessary to replank the south end of the bridge during the ensuing year.

A contract was made near the close of this year with the E. A. Blodgett Lumber Company for furnishing spruce for the replanking of the North End Bridge. This work will be completed during the early part of next season.

A contract has been made with the United States Lumber Preserving Company of New York City for furnishing seasoned lumber and wood blocks for the South End Bridge. This work will greatly reduce the expense of maintenance and prolong the life of the bridge for a number of years. All work on these bridges will be done by regular employees of the Street Department, instead of day labor.

#### **STREET WATERING AND DUST LAYING.**

This Department is required, according to orders of the Board of Street Cleaning, to lay the dust on 95.87 miles of streets. This has been done by carts owned by the city; by electric cars owned by the American Car Sprinkler Company of Worcester and an oil barrel sprinkler owned by the same company and both are now under contract. The latter appliance was used in oiling the Berkshire street, Indian Orchard, from Pine Point to the North street.

Very little water has been used in street sprinkling this season, except on paved streets, as we have endeavored to keep the streets dust free by the use of oil. Oil has proved very satisfactory only as a dust-layer but as a preservative of gravel and on dirt streets.

The oiling of Boston Road and Berkshire street, and other streets,—was very satisfactory as it not only kept down the dust but saved quite a considerable amount on repairs to the Automobile travel strips the top from gravel streets and on dirt roads. It not only lays the dust but preserves the wearing surface of the road, I would recommend more extended use of oil the next season.

STREET CLEANING.

Our paved streets have been cleaned by means of a rubber squeegee machine and by three two-horse sweepers. The squeegee has been used on the wood blocks, asphalt and bitulithic streets and the sweepers on the remainder of the paved streets. All cleaning of paved streets has been done during the night time.

By the use of oil on macadam streets we have been able to use machine sweepers on these streets, thus making the expense less than it would have been if hand sweepers had been used.

ASHES AND GARBAGE COLLECTION.

Ashes and garbage have been collected in the same manner as heretofore. An improved method of disposing of both ashes and garbage should soon be adopted and I recommend that a new system of ashes and garbage disposal be decided upon in the near future.

ACKNOWLEDGMENTS.

I desire to thank Mayor Edward H. Lathrop, Alderman Edward S. Goldthwaite, and Councilman Edward T. Broadhurst, members of the Board of Supervisors of Highways and Bridges, for their co-operation and courtesies extended to me in my endeavor to perform the duties which have devolved upon me since the resignation of Mr. Arthur A. Adams as superintendent of streets.

Respectfully submitted,

A. H. WOODWARD,

*Acting Superintendent of Streets.*

*Report on Streets.*

BOARD OF ALDERMEN, December 28, 1911.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 28, 1911.

Read and concurred.

GEO. J. CLARK, *Clerk.*

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Presented to the Mayor, for approval, December 29, 1911.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1911.

Approved for printing.

EDWARD H. LATHROP, *Mayor.*

**MACADAM REPLACED BY PAVING.**

STREET.	Limits.	Length in feet.	Area in sq. yds.
Bridge street,	Water street easterly,	250	1,138
Court street,	Court Square avenue to Water street,	594	1,980
Liberty street,	Main street easterly,	311	1,335
Pyncheon street,		868	2,810
Vernon street,		823	1,952
North Main street,	Calhoun to Grove street,	673	3,466
State street,	Terrence to Westminster street,	639	3,256
		4,158	15,937

**TABLE OF MACADAMIZED STREETS.**

\*Includes Macadam laid by Spfd. Street Ry. Co.

\*\*Macadam laid by Spfd. Street Ry. Co.

†Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.
Abbe ave. bridge app.,		872
Acushnet avenue,		1,088
Adams street,		1,003
†Agawam street,	Pecousic avenue to South st.,	230
Alden street,		2,776
Alexander street,		414
Alfred street,		490
Allen street,	Mill street to N. E. R. R.,	4,017 *
Allendale street,		663
Amherst street,	Harvard to Monmouth,	1,233
Andrew street,	State to Dawes,	1,323
Arbor street,		437
Arch street,	Main street westerly,	410
Armory street,	Federal st. to Warwick ave.,	2,305
Armory street,	Liberty to Carew,	1,570
Ashley street,		1,378
Auburn street,		787
Autumn street,		197
Avon place,		644
†Avon place,		67
Bancroft street,		1,435
Banks place,		225
Bay street,	St. James ave. to Cambridge street,	4,469 *
Beaumont street,	Dickinson st. to Belmont ave.,	689
Beech street,		528
Beechwood street,	Sumner ave. to Spruceland st.,	501
Belmont avenue,	Woodside ave. to Oakland st.,	2,599
†Belmont avenue,	Oakland st. to Sumner ave., easterly side,	
Belmont avenue,	Sumner avenue to White st.,	*
Belmont avenue,	South side, Garfield street to Sumner avenue,	1,624



TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Berkeley street,		453	1,510
Berkshire street,	State to Oak, I. O.,		**31,291
Berkshire street,	Oak to Chestnut, I. O.,	1,400	6,533
Birnie avenue,	Greenwich st. to Wason ave.,	3,369	8,077
Bliss street,	Main street to N. Y., N. H. & H. R. R.,	1,229	3,956
Bond street,		1,629	5,112
Bowdoin street,	St. James avenue to Inger- soll grove,	1,944	6,477
Bowles street,	Bay to McKnight,	750	2,500
Boylston street,		864	1,921
Bradford street,		862	2,935
Broad street,		959	3,177
Brookline avenue,		615	2,050
Buckingham place,		275	916
Buckingham street,		2,006	6,678
Butler street,		1,525	2,885
Byers street,	State to Frost,	480	1,193
Carew street,	Main to point near Bartlett,	2,618	7,672
Calhoun street,		1,129	3,435
Cass street,	Liberty to Butler,	1,762	5,407
Catharine street,	Bay to Dartmouth,	150	493
Cedar street,		1,962	6,655
Central street,		4,903	12,832
Central street,	Cedar to Mill,		**2,705
†Chapin terrace,	Chestnut to Marvin,	601	3,112
Charles street,	Liberty to Franklin,	618	1,888
Chase avenue,		583	1,943
Cherryvale avenue,		687	2,290
Chestnut street,	State to Worthington, and Jefferson avenue to Spring- field street,	4,829	11,096
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.
Clark street,		619
Clarendon street,	Bay to 200 feet north of Worthington,	1,452
Clinton street,		703
College street,		527
Congress street,		1,550
Cross street,	Willow to Maple,	606
Crystal avenue,		930
Cumberland street,	North to Chestnut,	426
Dale street,		812
Dartmouth street,		1,132
Demond avenue,		859
Dickinson street,	Marengo park to Sumner ave.,	3,074
Dorchester street,		567
Douglas street,		540
Eagle street,		556
East Court street,	Market to Dwight,	369
East Hooker street,		679
Eastern avenue,		4,516
Edwards street.		675
Elliot street,		1,007
Elm street,	N. Y., N. H. & H. R. R. to Court Square,	818
Elmwood street,		886
Emery street,		648
Essex street,		1,606
Euclid avenue,		1,169
Everett street,		1,500
Fairfield street,		882
Farnsworth street.	Width of 20 feet,	513
Federal street,	Pearl to Worthington,	353
Firglade avenue.		1,049
Fisk avenue.		1,682
Florentine gardens.		706
Florence street,	Walnut to Pine,	1,582
Florida street,	Bay to Ingersoll grove.	2,192

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Forest street,		784	2,502
Forest Park avenue,	Sumner avenue to Forest st.,	752	3,846
Forest Park avenue,	Fort Pleasant ave. to Forest street, 22½ feet in width,	1,760	4,475
Fort Pleasant avenue,	west side,	2,794	10,138
Fort Pleasant avenue,	east side,	2,674	7,252
Franklin street,	Main to Webster,	3,613	12,386
Franklin street,	Webster to Genesee, width of 20 feet,	1,139	3,797
Fremont street,		778	2,593
Fulton street,	Plainfield to Vine,	2,444	8,087
Gardner street,	Water to Main,	1,114	3,713
Garfield street,		1,577	5,220
Genesee street,	width of 20 feet,	276	821
George street,	Maple easterly,	110	647
Grace street,		354	885
Grant street,		577	1,603
Gray's avenue,		560	1,300
Greenleaf street,		740	3,098
Greenwich street,	North Main to Becket,	643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hall street,		992	3,307
Hamburg street,	width of 20 feet,	574	1,786
Hancock street,	Clark to State,	3,989	*13,479
Harriet street,		816	2,720
Harvard street,	Yale to Cornell,	1,565	5,206
Hawthorn street,		540	1,374
Hebron street,		698	2,204
Heywood street,	Liberty to Warwick ave.,	250	833
Hickory street,	Walnut to Sheffield st., and Alden street easterly,	4,710	11,589
High street,		2,563	5,544
Holyoke street,		776	2,001
Homer street,		582	1,940

TABLE OF MACADAMIZED STREETS.—*Continued*

NAME OF STREETS.	Limits.	Length in feet.
Howard street,	N. Y., N. H. & H. R. R. to Main,	1,27
Hubbard avenue,		56
†Huntington street,		64
Ingersoll grove,	Worthington st. to Bowdoin,	1,39
Ingraham avenue,		25
James street,		92
Jefferson avenue,		1,27
John street,		64
Keith street,		1,10
Kenwood park,		72
Kibbe avenue,		21
King street,	Walnut to Highland division N. Y., N. H. & H. R. R.,	2,56
Lafayette street,		56
Lebanon street,		1,92
Lexington avenue,		62
Leyfred terrace,		62
Liberty street,	Main street easterly, and Wolcott to Carew,	3,49
Liberty street,	Heywood avenue to Chicopee line,	
Lillian street,		38
Linden street,		1,28
Litchfield street,		38
Locust street,		79
Lombard street,		59
Longhill street,	Sumner ave. to Warner place,	47
Longhill street,	Sumner ave. to Washington boulevard,	1,74
†Longmeadow street,	Longhill street to Long- meadow line,	2,93
Loring street,		70
Madison avenue,		52
Magazine street,	Lincoln to Armory,	73
Magnolia terrace,	Sumner ave. to Pineywoods' ave.,	1,14

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Main street,	Mill river to Locust street,	980	5,864
Main street, I. O.,	Front to Parker,	5,568	19,691
Main street, I. O.,	Front st. to Ludlow bridge,		**11,127
Maple street,	top of hill to George street,	1,565	4,572
Mapledell street,		972	3,239
Maplewood terrace,	south side, Fort Pleasant ave. to Forest Park avenue,	1,301	3,075
Maplewood terrace,	north side, Forest Park ave. to Riverview terrace,		1,874
Marble street,		1,074	3,508
Marengo park,		1,869	6,230
Margaret street,	Water to Main,	842	2,807
†Marvin street,	Pratt st. to Chapin terrace,	430	1,440
Massasoit street,	Carew to Prospect,	851	2,803
Mattoon street,		524	1,775
McKnight street,	Sherman to Bowles,	532	1,773
Medford street,	N. Main st. to Birnie ave.,	624	2,080
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Monmouth street,		1,168	4,000
Monroe street,	Hancock to Eastern avenue,	1,345	3,736
Montmorenci street,		620	2,067
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mulberry street,	Maple to Union street,	2,015	5,706
Murray Hill avenue,		600	2,000
Myrtle street,		484	997
North street,	Liberty to Cumberland,	5,729	19,944
Northampton avenue,	Wilbraham road to Beverly street,	1,229	4,096
North Main street,	Grove to Chicopee line,	3,894	20,264
Norwood street,		1,117	2,911
Oak street,		1,344	4,136
Oak street, I. O.,	Berkshire to Water,	1,457	5,731
Oak street, I. O.,	Berkshire to Main,		**2,078

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Oakland street,	Allen to Sumner avenue,	4,153	14,808
Olive street,		478	1,248
Orleans street,		1,509	4,293
Osgood street,		890	2,948
Palmer avenue,		991	3,177
Park street,	Main to Willow and foot of hill to Maple,	865	2,545
Parkwood street,		450	1,500
Patton street,		1,631	5,438
Pearl street,	Chestnut to Byers,	1,220	3,513
Pecousic avenue,	Gardner street to Mill River bridge,	1,925	5,775
Pecousic avenue,	Mill River bridge to Main street,	350	972
Pecousic avenue,	Main street to Longhill,	3,625	10,663
Pendleton avenue,		2,582	6,545
Pine street,		4,420	14,344
Pineywoods avenue,	Washington road to Floren- tine gardens,	1,273	4,243
Plainfield street,	B. & M. R. R. bridge to Wa- son avenue,	5,395	14,716
Plainfield street,	Washburn to Wason avenue,		**3,953
Pleasant street,		428	1,026
Plymouth street,		479	1,597
Portland street,	N. Main to Birnie avenue,	610	2,033
†Pratt street,	Chestnut to Marvin,	600	2,000
Princeton street,	Bay to St. James avenue,	1,509	6,329
Princeton street,	Bay to St. James avenue,		**1,496
Prospect street,	Massasoit to Carew,	817	2,996
Quincy street,	Oak to Eastern avenue,	2,704	7,780
Randolph street,	Sumner ave. to Forest Park avenue,	916	3,053
Reed street,		660	2,493
Ringgold street,		730	2,432
Riverview street,		625	2,094
Riverview terrace,		281	721

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Rowland avenue,	Plainfield street to Abbe ave. bridge approach,	690	1,674
Rutland avenue,		277	926
Rutledge avenue,		516	1,599
Salem street,	Mattoon to Spring,	522	1,426
Sanford street,	Market to Dwight,	367	1,278
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895
Sheldon street,	Birnie avenue to N. Main,	651	2,027
Sherman street,	State to Clarendon,	1,623	5,394
South street,	Agawam street to Mill river,	1,863	6,878
Spring street,		2,373	7,322
Springfield street,	Chicopee line southwesterly,	3,700	7,400
Springfield street,	Chestnut street northeasterly,	400	1,355
Springfield street,	Chestnut to dingle, and Ham- burg street to Chicopee line,		**1,242
Spruce street,		699	1,737
Spruceland avenue,		1,370	4,566
State street,	Water st. easterly, City Li- brary to Federal, West- minster st. to Sherman, and Highland Div. N.Y., N.H. & H. R. R. to Berkshire street,	16,581	57,369
Stearns square,	east of park,	259	461
Stebbins street,	State to Quincy,	973	3,243
St. James avenue,	State to Highland division N. Y., N. H. & H. R. R.,	5,470	15,557
St. James avenue,	State to end of track,		**5,213
St. James circle,	St. James avenue to Jennette avenue,	1,131	1,509
Stockbridge street,		635	1,617
Summer street,	Federal to Armory,	378	1,260

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Sumner avenue,	Longhill street to Forest Park entrance,	3,215	15,227
Sumner avenue,	Park entrance to Lenox street, southerly side,	1,751	3,935
Sumner avenue,	Lenox st. to east line Dick- inson street,	484	4,254
Sumner avenue,	Longhill to White,		**11,631
Taylor street,		413	1,310
Temple street,		953	2,570
Tenth street,		1,577	4,451
Terrence street,		714	2,380
Thomas street,		583	1,945
Thompson street,		2,093	6,606
Tyler street,	Oak to Hancock,	1,346	4,002
Union street,	N. Y., N. H. & H. R. R. to ft. of hill, Maple to Eastern ave.,	7,440	25,077
Vine street,		745	1,892
Vinton street,		612	2,465
Walnut street,	Mill to Hancock,	1,457	*2,341
Waltham avenue,		985	2,628
Warner place,		691	2,152
Warriner avenue,		450	1,601
Warwick street,	Heywood street easterly,	811	2,703
Washington road,	Maplewood terrace to Piney- woods avenue,	1,083	3,610
Wason avenue,	B. & M. R. R. to N. Main st.,	505	1,718
Wason avenue,	B. & M. R. R. to N. Main st.,		**449
Water street,		5,145	16,525
Waverly street,		850	2,910
Webster street,		606	2,020
West street,		1,195	3,872
Westernview street,		650	2,167
Westford avenue,		1,380	6,133
Westminster street,		1,911	6,388
White street,	Allen to Longmeadow line,	8,288	19,446



TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham avenue,		2,046	6,820
Wilbraham road,	State to Homer,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water,	1,307	4,000
William street,	N. Y., N. H. & H. R. R. to Main,	1,368	4,359
Willow street,	Union to State,	895	2,493
Winthrop street,		659	2,397
Woodside terrace,	Belmont ave. to Forest Park ave.,	463	1,543
Woodside terrace,	Belmont avenue easterly,	474	1,580
Worcester street, I. O.,	Pine to Fiberloid Co.'s drive- way, 18 ft. in width,	4,994	10,988
Worthington street,	Spring street easterly,	1,259	4,197
Worthington street,	Sackett's pl. to Federal st.,	1,121	2,861
Worthington street,	Armory st. to St. James ave.,	2,514	7,961
Yale street,	Dartmouth to Monmouth,	1,493	5,142
York street,		1,000	2,997
Total,	73.79 miles.	389,586	1,835,033

TABLE OF PAVED STREETS.

Name	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Barnes street,		Bitulithic,	178	552	1909
Belmont avenue,	Hall street westerly,	Catskill blocks,	1,362	1,211	1901
Belmont avenue,	Hall street to Oakland,	Metropolitan blocks,	1,023	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	483	1906
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Dwight to Chestnut,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	122	446	1910
		Asphalt blocks, 5" x 12" x 3",	195	712	1910
Bridge street,	Main street, 493 feet westerly,	Bitulithic,	493	1,746	1905
Bridge street,	extension to Water street,	Bitulithic,	252	895	1911
Bridge street,	Water street to Old Toll bridge,	Granite blocks,	249	713	1907
Catharine street,	State to Bay,	Syracuse brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	150	376	1903
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895
Chestnut street,	Lyman to B. & A. R. R.,	Granite blocks,	256	1,471	1889
Chestnut street,	B. & A. R. R. to Linden,	Granite blocks,	1,640	5,235	1892
Chestnut street,	Linden to Everett,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	419	1,438	1909
Chestnut street,	Everett to Carew,	Granite blocks,	354	718	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Chestnut street,	Allendale to Jefferson avenue,	Bitulithic,	825	2,898	1905
Court street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick, Syracuse brick,	317	1,149	1897
Court street,	Court Square avenue to Water st.,	Bitulithic,	—	174	1897
Court Square avenue,	Court to Elm,	{ Rock asphalt, Syracuse brick,	—	128	1907
Cypress street,	Main street westerly,	Granite blocks,	617	2,699	1911
Cypress street,	Boylston to Fulton,	Granite blocks,	193	503	1897
Dwight street,	State to Lyman,	Syracuse brick,	—	380	1897
East Court street,	Main to Market,	Rock asphalt,	459	1,700	1904
Elm street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	216	848	1905
Ferry street,	Main street to foot of hill,	Bitulithic,	2,324	9,905	1896
Fort street,	Main to Water,	Granite blocks,	117	297	1900
Fulton street,	Cypress to Vine,	Granite blocks,	348	949	1897
Hampden street,	Main street westerly,	Bitulithic,	—	380	1897
Hampden street,	completion, Main to Water,	Granite blocks,	1,389	3,597	1910
Harrison avenue,	Main to Dwight,	Granite blocks,	670	1,770	1895
Hillman street,	Main to Dwight,	Bitulithic,	1,125	3,006	1906
		Trinidad asphalt,	212	821	1904
		Bitulithic,	394	1,539	1905
			586	2,247	1896
			648	2,025	1906

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
King street,	St. Ry. turnout,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	317	1,023	1908
Liberty street,	Main street, easterly,	Bitulithic,	311	1,335	1911
Liberty street,	Chestnut to Cass,	Syracuse brick,	1,399	4,571	1900
Liberty street,	Cass to Heywood avenue,	Syracuse brick,	1,147	3,971	1901
Lyman street,	Main to Chestnut,	Granite blocks,	1,305	4,599	1889
Lyman street,	Chestnut street, easterly,	Granite blocks,	503	2,095	1908
Lyman street,	extension easterly to Spring st.,	Granite blocks,	228	949	1909
Main street,	Locust to Marble,	Syracuse brick,	840	4,381	1897
Main street,	Marble to William,	Syracuse brick,	1,762	8,307	1896
Main street,	William to Bliss,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	1,150	6,460	1906
Main street,	Bliss to State,	Syracuse brick,	241	1,355	1893
Main street,	State to Worthington,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	1,899	10,798	1904
Main street,	Worthington to Hampden, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 8",	382	1,183	1901
Main street,	Worthington to Hampden, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	—	962	1903
Main street,	Hampden to Lyman,	Creo-resinate wood bl'ks, 4" x 4" x 8",	153	775	1903

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Lyman to Liberty,	Creo-resinate grooved wood bl'ks, 4" x 4" x 8",	484	2,780	1903
Main street,	Liberty to Sharon, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	453	1,185	1903
Main street,	Liberty to Sharon, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	—	1,487	1907
Main street,	Sharon to near Franklin and Emery,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	509	3,103	1907
Main street,	near Franklin, east side,	Syracuse brick,	36	144	1907
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,605	1897
Main street,	Emery to Sargeant, west side,	Catskill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catskill and Metropoli- tan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,665	1904
Maple street,	High to State,	Bitulithic,	598	2,530	1905
Market street,	State to Harrison avenue,	Bitulithic,	968	1,887	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906
North Main street,	Morgan to Bancroft,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	879	4,544	1909
North Main street,	Bancroft to Calhoun,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	839	4,210	1910

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
North Main street,	Calhoun to Grove,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	673	3,466	1911
North Main street,	at Wason avenue,	Syracuse brick,	—	196	1908
Plainfield street,	Sargeant to Fulton,	Syracuse brick,	1,710	10,249	1902
Pyncheon street,	Main to Water,	Bitulithic,	870	2,866	1911
Railroad street,	Main to Water,	Granite blocks,	516	1,839	1906
Sanford street,	Main to Market,	Rock asphalt,	102	307	1900
State street,	Main street, westerly,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	598	2,357	1909
State street,	Main to Dwight,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	478	2,403	1908
State street,	Dwight to City Library,	Granite blocks,	541	1,681	1890
State street,	Dwight to Chestnut (widened),	Granite blocks,	—	217	1896
State street,	Federal to Oak,	Syracuse brick,	847	4,590	1897
State street,	Oak to Stebbins,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	762	3,031	1909
State street,	Pleasant to Terrence,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	386	1,497	1910
State street,	Terrence to Westminster,	Creo-resinate wood bl'ks, 3" x 8½" x 6" to 10",	639	3,266	1911

## TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
State street, State street,	at St. James avenue, Sherman to Highland Div., N. Y., N. H. & H. R. R.,	Syracuse brick, Bitulithic,	— 820	188 4,352	1907 1905
Summer street, Summer street, Summer street,	Spring to near Autumnn, Autumn to Kibbe avenue, Kibbe avenue to point 85' west of Federal,	Granite blocks, Granite blocks, Granite blocks,	567 1,259 787	1,512 4,029 2,635	1907 1895 1901
Taylor street, Townaley avenue, Vernon street,	Main to Dwight, State to Union,	Bitulithic, Bitulithic, Bitulithic,	770 142 821	2,580 214 2,047	1904 1908 1911
Walnut street, Walnut street, Walnut street, Walnut street, Walnut street,	Union to Pendleton avenue, Pendleton ave. to Lebanon st., Lebanon to Hancock, at Ashley,	Syracuse brick, Syracuse brick, Bitulithic, Bitulithic, Bitulithic,	838 873 1,195 1,005 —	2,144 3,140 3,888 3,334 44	1899 1900 1905 1906 1911
White street, Worthington street, Worthington street, Worthington street,	Allen to Orange, Main to Dwight, Dwight to Fairbanks place, Fairbanks place to east line of Spring,	Syracuse brick, Syracuse brick, Syracuse brick, Syracuse brick,	1,610 739 1,060 269	2,400 2,644 3,869 1,003	1902 1896 1901 1903
Worthington street,	Main to Broadway,	Bitulithic,	404	1,418	1905

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Worthington street,	Broadway to Water street,	Creo-resinate wood bl'ks, 8" x 8½" x 6" to 10",	299	1,081	1909
Worthington street,	at Sackett place,	Creo-resinate wood bl'ks, 8" x 8½" x 6" to 10",	265	886	1908
Worthington street,	Federal to Armory.	Creo-resinate wood bl'ks, 8" x 8½" x 6" to 10",	874	1,312	1908
Total,			64,629	244,475	

RECAPITULATION.

Material.	Length in feet.	Length in miles.	Area in sq. yds.	Material.	Length in feet.	Length in miles.	Area in sq. yds.
Bitulithio,	15,200	2.879	58,417	Metropolitan blocks,	1,028	.194	996
Catskill blocks,	2,809	.532	6,741	Rock asphalt,	1,760	.333	5,680
Creo-resinate wood blocks,	12,080	2.287	59,613	Syracuse brick,	19,584	3.7	77,920
Trinidad blocks,	11,297	2.140	36,716	Trinidad asphalt.	586	.111	2,247



# FORTY-THIRD ANNUAL REPORT

## OF THE

# SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1911.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 1, 1911.

### RECEIPTS.

#### SEWERS AND DRAINS.

Appropriation, . . . . .	\$35,000 00	
Sewer fees, { Entrances, . . . . .	13,173 27	
{ Building private drains, . . . . .	6,396 09	
Departments and private parties, bills rendered, . . . . .	408 03	
		\$54,977 39

### EXPENDITURES.

Building private drains, . . . . .	\$5,424 93
City teams and automobile, uncredited balance, . . . . .	1,233 17
City yard, . . . . .	1,293 97
Engineering, . . . . .	495 71
Foremen's winter and holiday pay, . . . . .	165 13
Amount carried forward, . . . . .	\$8,612 91

Amount brought forward, . . .	\$8,612 91	
Materials on hand, . . . . .	317 92	
Office and general expenses, . . .	1,172 59	
Refunds on account of fees for sewer en- trances, . . . . .	25 00	
Refunds—unexpended balances on deposits for building private drains, . . .	544 90	
Salary of assistant superintendent, . .	2,000 00	
Sewers, {	Cleaning, . . . . .	2,570 77
	Construction, . . . . .	33,372 93
	Flushing, . . . . .	2,320 73
	Repairs, . . . . .	1,077 11
Supplies, . . . . .	213 37	
Tools, . . . . .	789 23	
Work and material charged to depart- ments and private parties, . . .	519 77	
	<hr/>	
	\$53,537 23	
Unexpended balance, . . . . .	1,440 16	
	<hr/>	
		\$54,977 39

## BILLS RECEIVABLE.

Bills receivable, November 30, 1910, . .	\$590 59	
Bills committed, fiscal year 1911, . .	19,919 20	
	<hr/>	\$20,509 79
Bills paid, fiscal year 1911, . . . . .	\$19,945 76	
Abatements, . . . . .	164 51	
	<hr/>	20,110 27
		<hr/>
Bills receivable, November 30, 1911,		\$399 52

# SEWER CONSTRUCTION CLASSIFIED.

## VITRIFIED CLAY PIPE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
8"		111'	111'
10"	6,994'	729'	7,723'
12"	3,171'	1,725'	4,896'
15"	497'	1,799'	2,296'
18"	629'	498'	1,127'
20"	704'	1,059'	1,763'
24"	865'	460'	1,325'
Total	12,860'	6,381'	19,241'

## CONCRETE.

SIZES.	LENGTH IN FEET.		Total Length.
	Reconstruction.	New Construction.	
2'-3" circular .....		463'	
2'-2" x 3'-3" egg shape .....		919'	
Total .....		1,382'	1,382'

## SEWER CONSTRUCTION AND RECONSTRUCTION.

DESCRIPTIONS AND COSTS—FISCAL YEAR 1911.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Applewood place, Belmont avenue northerly.....	Clay	469	10"	\$391 81
Belmont avenue, manhole.....		....	....	44 05
Berkeley street, manhole.....		....	....	42 80
Blake Hill, Fort Pleasant avenue easterly, completion.....	Clay	211	10"	217 88
Bowles street, Bay street southerly, relaying, completion.....		....	....	20 55
Bowles street, manhole.....		....	....	26 99
Bridge street, manhole.....		....	....	43 59
Brightwood avenue, Plainfield street westerly.....	Clay	171	15"	178 00
Bristol street, Marlborough street southerly.....	Clay	552	10"	293 99
Brooklyn avenue, Sumner avenue southerly.....	Clay	423	12"	329 56
Brunswick street, Brooklyn avenue southerly.....	Clay	307	10"	190 48
Calhoun street, manholes.....		....	....	105 56
Carew street, manhole.....		....	....	38 31
Center street, Oak Grove avenue northerly, extension.....	Clay	860	10"	328 35
Centre street, I. O., flush gate.....		....	....	29 90
Central street, Main to Maple street, rebuilding.....	Con- crete Clay Clay	463 460 434	2'-3" } circular } 24" } 20" }	2,332 17 2,665 22
Chestnut street, Worthington to Bridge street.....	Clay	353	24"	1,148 06

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Claremont street, Orange street southerly.....	Clay	492	10"	\$264 58
Clermont street, I. O., Healey avenue easterly.....	Clay	150	10"	123 28
Clifton avenue, Central street westerly, relaying.....	Clay	111	8"	54 58
College street, manhole.....		....	....	37 80
Court street, manhole.....		....	....	39 60
Cross street, manhole.....		....	....	40 69
Cumberland street, easterly to North street, extension.....	Clay	238	12"	284 06
Dawes street, manhole.....		...	....	41 96
Dwight street, Harrison avenue northerly, relaying, completion....		....	....	127 81
Elliott street, manhole.....		....	....	32 91
Euclid avenue, flush gate.....		....	....	24 27
Everett street, Cass street easterly, relaying, completion.....		....	....	61 71
Florida street, Worthington street northerly to Ingersoll grove, relaying.....	Clay	555 279	15" } 12" }	978 89
Foster street, Knox street easterly...	Clay	511	12"	517 25
Franklin street, Garden brook easterly to Chestnut street, rebuilding .....	Concrete Clay	919 295	2'-2"x3'-3" } egg shape } 20"	4,106 84 652 82
Greenacre square, north, Foster street easterly.....	Clay	201	10"	149 62
Greenacre square, south, Foster street easterly.....	Clay	246	10"	163 73

**SEWER CONSTRUCTION AND RECONSTRUCTION.—**

LOCATION.	Material.	Length in Feet.	Size.
Greenwood street, North street easterly, relaying, completion....		....	....
Hampshire street, I. O., Pine street westerly.....	Clay	334	10"
Healey avenue, I. O., Worcester street southerly.....	Clay	336	15"
Hiawatha street, White street westerly.....	Clay	363	10"
Hollywood street, Dickinson street easterly.....	Clay	174	10"
Homer street, State street southerly, extension.....	Clay	94	10"
Ingersoll grove, Florida street easterly.....	Clay	146	10"
Johnson street, I. O., Main to South street.....	Clay	500 463	20" } 18" }
King street, Hancock to Logan street, relaying, completion.....	Clay	238 239	12" } 10" }
Knox street, Windsor street southerly, relaying.....	Clay	34	15"
Laurel avenue, extension toward Connecticut river.....	Clay	20	18"
Lyman street, extension easterly from near Chestnut street, relaying.	Clay	202	15"
Main street, Locust to Mill street, relaying.....	Clay	385 394	15" } 12" }
Main street, I. O., Bay street westerly, extension.....	Clay	149	12"
Main street, I. O., manhole.....		....	....
Marble street, manholes.....		....	....

SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material	Length in Feet.	Size.	Cost.
Marengo park, flush gate.....		....	....	\$22 37
Massachusetts avenue, manhole and flush gate.....		....	....	47 67
Massasoit street, Carew street northerly, completion.....		....	....	11 40
Massasoit street, Montmorenci street to Lexington avenue, rebuilding, completion.....		....	....	16 49
Maynard street, manholes.....		....	....	63 00
Mill street, Dickinson street easterly.	Clay	325	24"	619 85
Mulberry street, Maple to School street, relaying.....	Clay	426 270	15" 12" }	873 04
Noel avenue, Mill street southerly..	Clay	204 146	20" 18" }	569 64
North street, Ferry street northerly..	Clay	148	10"	223 34
North Main street, manhole.....		....	....	37 32
North Main street, northerly to Chicopee line, completion....		....	....	10 48
North Main street, Wason avenue southerly, completion.....		....	....	11 40
North Main street, Osgood street southerly.....	Clay	199	10"	641 23
North Main street, Wason avenue northerly, extension.....	Clay	252	12"	181 36
North Main street, Eagle street northerly, extension.....	Clay	39	24"	88 55
Oak street, Walnut to Tyler street relaying.....	Clay	177	18"	297 10
Oak Grove avenue, Bay street southerly, extension.....	Clay	50	10"	42 81

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CON

LOCATION.	Material.	Length in Feet.	Size.
Oak Grove avenue, Center street northerly .....	Clay	492	10"
Orange street, extension easterly near Allen street .....	Clay	225	10"
Orlando street, Belmont avenue northerly .....	Clay	246 193	12" } 10" }
Plainfield street, Sanderson terrace southerly, extension .....	Clay	148	24"
Prescott street, Belmont avenue northerly .....	Clay	340	10"
Prospect street, Massasoit street easterly, extension .....	Clay	325 423	12" } 10" }
School street, manhole and flush gate .....		....	....
Spencer avenue, Sumner avenue southerly .....	Clay	282 315	12" } 10" }
Spring street, manhole .....		....	....
Spruce street, manhole .....		....	....
Sumner avenue, Castle avenue easterly, extension .....	Clay	629	12"
Taylor street, Main to Dwight street, relaying .....	Clay	330 321 197	20" } 18" } 15" }
Thorndyke street, Sumner avenue southerly .....	Clay	116	12"
Tyler street, manholes and flush gate .....		....	....
Vinton street, manhole .....		....	....
Waverly street, manholes .....		....	....
Webster street, manholes and flush gate .....		....	....



SEWER CONSTRUCTION AND RECONSTRUCTION—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Wellesley street, St. James avenue to: Cornell street, relaying.....	Clay	236 224	12" } 10" }	\$540 30
White street, flush gate.....		....	....	25 08
Windsor street, Knox street westerly, relaying.....	Clay	308 266	12" } 10" }	560 76
		20,623		\$33,372 93

NOTE.—The costs of the above described sewers include the costs of manholes and flush gates.

## SEWERS ABANDONED—1911.

LOCATION.	Material.	Length in Feet.	Size.
Central street, Main to Maple street.	Brick	444	2'x3'
	Brick	709	1'-8" x 2'-6" }
	Clay	189	18"
Clifton avenue, Central street west- erly.....	Clay	119	8"
Court street, Water street easterly...	Cem.	243	12"
Florida street, Worthington street to Ingersoll grove.....	Cem.	273	15"
	Cem.	561	12"
Foster street (Central street place), Knox street northerly.....	Cem.	279	10"
	Cem.	61	12"
Franklin street, Garden brook to Chestnut street.....	Cem.	469	18"
	Cem.	735	15"
King street, Eastern avenue to Logan street.....	Cem.	465	12"
	Clay	72	10"
Knox street, Windsor street south- erly.....	Cem.	19	15"
Lyman street, easterly from near Chestnut street.....	Cem.	202	15"
Main street, Locust to Mill street...	Cem.	745	15"
Mulberry street, Maple to School street.....	Cem.	687	15"
Oak Grove avenue, Shattuck avenue northerly.....	Clay	160	12"
Oak street, Walnut to Tyler street...	Cem.	158	18"
Taylor street, Main to Dwight street...	Cem.	650	15"
	Clay	198	13"
Walnut street, Pine to Oak street...	Cem.	18	18"
Wellesley street, Cornell street east- erly.....	Cem.	373	12"
Windsor street, Pine street south- erly.....	Cem.	80	15"
	Cem.	485	10"
		8,344.	

**SUMMARY.**

DESCRIPTION.	Length in Feet.	Cost.
Concrete sewers built by regular appropriation .....	1,382	\$6,466 90
Clay pipe sewers built by regular appropriation .....	19,241	25,478 73
Flush gates and manholes built by regular appropriation .....		1,427 30
	20,623	33,372 93
Sewers abandoned .....	8,344	9,767 00
Net addition to sewer system .....	12,279	\$23,605 93

**SEWER CLEANING AND REPAIRS.**

	COST OF Cleaning.	
Bancroft street, . . . . .		
Bay street, . . . . .	\$56	95
Bowles street, . . . . .	44	64
Calhoun street, . . . . .	17	17
Cambridge street, . . . . .	85	00
Carew street, . . . . .		
Clarendon street, . . . . .		
Cleveland street, . . . . .	12	73
Clinton street, submerged outlet, . . . . .	14	29
College street, . . . . .		
Colton street, . . . . .	32	02
Court street, . . . . .		
Dawes street, . . . . .	42	50
Dickinson street, . . . . .	9	82
Dwight street, . . . . .		
Elm street, submerged outlet, . . . . .	14	91
Ferry street, . . . . .	58	31
Florida street, . . . . .		
Forest Park avenue, . . . . .	27	13
Garden brook, . . . . .	432	82
Girard avenue, . . . . .	26	63
Green street, . . . . .	34	00
Greenwood street, . . . . .		
Grover street, . . . . .	53	13
Hampden street, . . . . .		
Hancock street, . . . . .	103	13
Hickory street, . . . . .	22	75
Homer street, . . . . .		
Kibbe hollow, . . . . .		
Laurel avenue, . . . . .	103	44
Lebanon street, . . . . .	17	00
Liberty street, . . . . .	96	07
Locust street, . . . . .		
Lowell street, . . . . .	2	19

**SEWER CLEANING AND REPAIRS—CONTINUED.**

	COST OF	
	Cleaning.	Repairs.
Main street, . . . . .	\$195 94	\$19 71
Main street, I. O., . . . . .	13 00	10 02
Maplewood terrace, . . . . .	22 99	
Margaret street, . . . . .		12 84
Marion street, . . . . .	10 62	
Mason street, . . . . .	51 00	
Massasoit street, . . . . .	58 60	15 99
Maynard street, . . . . .		16 98
McKnight street, . . . . .	34 00	27 12
Mill River intercepting sewer, . . . . .		10 89
Montrose street, . . . . .	33 13	
Mulberry street, . . . . .		16 49
North Main street, . . . . .	25 50	6 21
Oak street, . . . . .	17 13	6 01
Osgood street, . . . . .		90 53
Pendleton avenue, . . . . .	59 50	
Pine street, . . . . .		23 10
Plainfield street, . . . . .	51 00	18 00
Prince street, . . . . .	17 00	2 51
Roseland street, . . . . .	25 50	
Rutledge avenue, . . . . .		23 82
Sanford street, . . . . .	14 61	
Sargeant street, . . . . .		34 54
Sharon street, . . . . .	68 00	2 72
Sheldon street, . . . . .		15 12
Sundry sewers, costing less than \$10, . . . . .	153 25	372 56
Spring street, . . . . .	36 12	2 97
State street, . . . . .	125 25	
Summer street, . . . . .		33 25
Union street, . . . . .	70 72	
Vernon street, . . . . .	55 25	3 94
Vine street, . . . . .	46 75	36 00
Water street, . . . . .	17 00	

*Report on Sewers.***SEWER CLEANING AND REPAIRS—CONTINUED**

	<b>COST</b> <b>Cleaning.</b>
Wilbraham avenue, . . . . .	<b>\$14 86</b>
Windsor street, . . . . .	
Worcester avenue, . . . . .	<b>31 75</b>
Worthington street, submerged outlet, . . .	<b>14 92</b>
Worthington street, . . . . .	<b>75</b>
	<b>\$2,570 77</b>

## GENERAL DESCRIPTIONS.

The total expenditures for new sewer construction and reconstruction during the year amounted to \$33,372.93. Deducting cost of sewers abandoned, amounting to \$9,767.00, leaves \$23,605.93 to be added to the value of the sewer system as of November 30, 1910.

The total value of our system on November 30, 1911, was accordingly \$1,528,138.58 and embraces a total of 124.8 miles of sewers in the care of this department.

As heretofore, all sewer construction has been done directly by this department, a practice originated in recent years.

## SEWER FEES.

The receipts from entrance fees exclusive of the fees on account of building private drains amounted to \$13,148.27 and the number of connections made to buildings during the year was 488.

## PIPE SEWERS.

The length of pipe sewers laid during the year was 19,241 feet.

As may be seen by reference to the table, this was distributed throughout the entire city, not only in the sections recently opened for residence purposes but also in the older sections, where it has become necessary to replace old sewers with those of larger capacity and improved materials.

## TRUNK SEWERS.

Trunk sewers, of Portland cement concrete, have been built in Franklin street between Garden brook and Chestnut street, and in Central street between Morris and Maple streets, that in Franklin street to replace a cement pipe sewer which had caused trouble and the one in Central street to replace a small brick sewer which was found to be in a very defective condition.

## CEMENT PIPE SEWERS.

We have been able this last season to devote more than the usual amount of time and money to the replacing of the old cement pipe sewers with modern construction. A number of these old sewers collapsed in part, during the past year, and in most cases have been rebuilt. There are still remaining some twenty-three miles of cement pipe sewers which should be replaced as rapidly as practicable, as they are a continual source of expense and danger.

## ACKNOWLEDGMENTS.

Since the resignation of Mr. A. A. Adams as Superintendent of Sewers, April 1, 1911, the work of this department has been under my supervision and I wish to acknowledge the co-operation of the foremen and men, and also to thank Aldermen W. A. Dodge, Ralph W. Wight, and Edward S. Goldthwaite, members of the Committee on Sewers and Drains, for the many courtesies extended to me.

Respectfully submitted,

HOWARD O. BUCK,

*Acting Superintendent of Sewers.*



BOARD OF ALDERMEN, December 28, 1911.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 28, 1911.

Read and concurred.

GEO. J. CLARK, *Clerk.*

Presented to the Mayor, for approval, December 29, 1911.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 29, 1911.

Approved for printing.

EDWARD H. LATHROP, *Mayor.*

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Autumn st., Summer to Worthington st.....	239	15"	Clay	\$715.29
Avon place, Maple st., east- erly.....	695	24"	Clay	3,359.45
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4"x5'-0"	Brick	8,914.04
including Chestnut st., Bancroft to Montmo- rency st.....	379	3'-2"x4'-9"	Brick	
Montmorency st., Chest- nut st., easterly.....	43	3'-2"x4'-9"	Brick	
Bay st., St. James ave. to Pleasant st.....	250 245 228	15" 12" 10"	Clay Clay Clay	\$715.01
Florida to Pleasant st....	235	12"	Clay	
Florida to Sherman st....	304	20"	Clay	
	377	18"	Clay	1,092.89
	812	15"	Clay	945.16
Sherman to Clarendon st.	151	8"	Cem.	46.82
Catharine to Clarendon st.	194	10"	Clay	200.66
Bowles to Cambridge st.	1,037	2'-8"x4'-0"	Brick	8,056.62
	360	2'-2"x3'-3"	Brick	
Cambridge to Sycamore st.	332	24"	Clay	
	360	20"	Clay	1,348.03
				12,726.21
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	152.81
Colton st., easterly.....	106	8"	Clay	75.08
				227.89
Beaudry st., I. O., Main st., southerly.....	300 270	12" 10"	Clay Clay	745.95
Beaumont st., Belmont ave., northerly.....	250 431	12" 10"	Clay Clay	
Belmont ave. to Sumner ave.....	264	10"	Clay	183.91
				587.78
Beech st., Central st., north- erly.....	410	10"	Cem.	95.58
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	19.09
Belgrade place, Walnut st., westerly.....	220 140	8" 6"	Clay Clay	....
Bellevue ave., Belmont ave., easterly.....	300 300	18" 15"	Clay Clay	
	194	12"	Clay	....
Dickinson st., westerly...	744	10"	Clay	....

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Allendale st., North st., easterly.....	272 340	12" 10"	Clay } Clay }	\$401.43
Amaron st., State st., south- erly.....	349	10"	Clay	222.90
Amherst st., Harvard st., northerly.....	441 25	12" 10"	Cem. Clay	\$146.99 23.78
Princeton to Monmouth st.	512 191	12" 10"	Clay } Clay }	622.90
Andrew st., State st., north- erly.....	463 422 382	20" 18" 12"	Clay } Clay } Clay }	793.67 1,809.21
Applewood place, Belmont ave., northerly.....	469	10"	Clay	391.81
Arbor st., Butler to Carew st.	398	12"	Clay	318.05
Arch st. (see Garden brook)				
Armory hill sewer (see pri- vate ways).				
Armory st., Worthington st., southerly.....	570	15"	Cem.	658.06
Summer st., southerly...	374	12"	Clay	384.78
	325	10"	Clay	193.87
B. & A. R.R. to Liberty st.	690 360 271	15" 12" 10"	Clay } Clay } Clay }	1,165.47
Liberty to Sullivan st. ...	450	1'-10"x2'-9"	Brick	2,439.42
	476	1'-8"x2'-6"	Brick	
Sullivan to Carew st. ....	156 267 290	24" 20" 12"	Clay } Clay } Clay }	1,006.45
Carew st., northerly .....	452	20"	Clay	1,209.52
	803	10"	Clay	
Springfield st., southerly .	31 146	20" 18"	Clay } Clay }	317.00
Ashley st., Cedar st., easterly	65 580 697	18" 15" 12"	Cem. Cem. } Cem. }	80.45 1,555.00
				1,635.45
Ashmont st., Belmont ave., northeasterly.....	250 200	12" 10"	Clay } Clay }	351.57
Atwater Terrace road, Greene lane, westerly..	322 199	20" 18"	Clay } Clay }	....
Auburn st., Fulton st., east- erly.....	397 335	12" 10"	Clay } Clay }	655.06
Austin st., State st., northerly	363	10"	Clay	334.91

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
Autumn st., Summer to Worthington st.....	239	15"	Clay	
Avon place, Maple st., east- erly.....	695	24"	Clay	
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4"x5'-3"	Brick	
including Chestnut st., Bancroft to Montmo- rency st.....	379	3'-2"x4'-9"	Brick	
Montmorency st., Chest- nut st., easterly.....	43	3'-2"x4'-9"	Brick	
Bay st., St. James ave. to Pleasant st.....	250 245 228	15" 12" 10"	Clay Clay Clay	\$715.0
Florida to Pleasant st....	235	12"	Clay	321.0
Florida to Sherman st....	304 377 812	20" 18" 15"	Clay Clay Clay	1,092.8
Sherman to Clarendon st.	151	8"	Cem.	945.1
Catharine to Clarendon st.	194	10"	Clay	46.8
Bowles to Cambridge st.	1,037	2'-8"x4'-0"	Brick	200.6
	360	2'-2"x3'-3"	Brick	8,056.6
Cambridge to Sycamore st.	332 360	24" 20"	Clay Clay	1,348.0
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	152.8
Colton st., easterly.....	106	8"	Clay	75.0
Beaudry st., I. O., Main st., southerly.....	300 270	12" 10"	Clay Clay	
Beaumont st., Belmont ave., northerly.....	250 431	12" 10"	Clay Clay	403.8
Belmont ave. to Sumner ave.....	264	10"	Clay	183.9
Beech st., Central st., north- erly.....	410	10"	Cem.	
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	
Belgrade place, Walnut st., westerly.....	220 140	8" 6"	Clay Clay	
Bellevue ave., Belmont ave., easterly.....	300 300 194	18" 15" 12"	Clay Clay Clay	...
Dickinson st., westerly...	744	10"	Clay	...

# Report on Sewers.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Belmont ave., Fort Pleasant</b>				
ave., easterly.....	90	10"	Clay	\$93.92
Mill river to Woodside ter.	954	20"	Clay	2,698.67
Woodside ter. to Litchfield	660	2'- 0"x3'-0"	Brick	11,750.19
	445	1'-10"x2'-9"	Brick	
	595	1'- 8"x2'-6"	Brick	
	550	1'- 6"x2'-3"	Brick	
Litchfield st. to Kenwood	432	20"	Clay	1,495.58
Park.....	493	18"	Clay	
Kenwood Park to Sumner	301	15"	Clay	871.69
ave.....	403	12"	Clay	
	616	10"	Clay	
*Sumner ave. to Wood-	830	3'- 4"x5'-0"	Brick	8,216.97
lawn st.....	819	3'- 0"x4'-6"	Brick	
	245	3'- 0"x4'-6"	Br.C.	3,470.41
	416	2'-10"x4'-3"	Br.C.	
*Woodlawn to White st...	1,637	2'-10"x4'-3"	Con.	7,237.33
				<u>\$35,</u>
<b>Belmont place, Belmont</b>				
ave., southerly.....	216	10"	Clay	
<b>Benton ave., Benton st.,</b>	300	10"	Clay	513.96
easterly.....	325	8"	Clay	
<b>Benton st., State st., south-</b>	301	12"	Clay	
erly.....	300	10"	Clay	
	247	8"	Clay	
	320	8"	Clay	
<b>Berendo st., Grenada ter-</b>				
race to Alderman st. ....	345	12"	Clay	
<b>Berkeley st., Princeton to</b>				
Monmouth st.....	483	12"	Clay	
<b>Berkshire st., I. O.....</b>				
Oak to Myrtle st.....	701	12"	Cem.	946.21
Oak st., easterly.....	387	12"	Clay	389.89
Chestnut to Myrtle st....	577	12"	Clay	545.74
<b>Besse place, Main st., west-</b>				
erly.....	290	10"	Clay	
<b>Birnie ave., Wason ave.,</b>				
northerly and easterly	896	24"	Clay	1,534.02
to North Main st. ....	174	15"	Clay	
Wason ave., southerly ...	350	18"	Clay	1,024.75
	417	15"	Clay	
Worcester st. extension,				
northerly to Grace st....	162	15"	Cem.	....
Worcester st. extension,				
southerly to Walter st. .	144	12"	Cem.	....

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Massasoit st., easterly....	580	18"	Cem.	\$671.51
	200	12"	Cem.	153.28
Prospect to Armory st....	989	2'-8" cir.	Con. }	8,513.49
	1,365	2'-6"x3'-9"	Con. }	
Armory st., easterly.....	1,101	10"	Clay }	2,400.86
	448	8"	Clay }	
Liberty st., easterly.....	502	15"	Clay }	
	499	12"	Clay }	
	434	10"	Clay }	—
				\$33,690.67
Carlisle st., Wilbraham road,	400	10"	Clay }	355.69
southerly.....	246	8"	Clay }	
Cass st., Liberty to Franklin	500	12"	Clay }	575.28
st.....	163	10"	Clay }	
Linden st., southerly.....	596	15"	Clay }	892.07
Linden st., northerly.....	224	12"	Clay }	
				1,467.35
Catharine st., Dartmouth to				
McKnight st.....	833	2'-0"x3'-0"	Brick }	4,428.92
State to McKnight st....	348	15"	Clay }	1,348.95
	438	12"	Clay }	
	333	10"	Clay }	
				5,777.87
Cedar st., Pine to Walnut st.	180	3'-10"x5'-9"	Brick }	889.35
	1,074	3'- 8"x5'-6"	Brick }	6,206.73
Pine st., westerly.....	378	12"	Cem.	288.32
				7,384.40
Cedar st., I. O., Main to				
river.....	433	2'-0"x3'-0"	Brick }	2,001.44
Main to Centre st.....	274	12"	Clay }	263.92
				2,265.36
Cemetery brook (see private				
ways).				
Center street, Oak Grove				
ave., northerly.....	1,008	10"	Clay }	353.08
Centre st., I. O., Oak to Pine				
st.....	463	12"	Cem. }	510.73
Pine to Cedar st.....	349	12"	Clay }	668.19
	300	10"	Clay }	
Cedar st., easterly.....	400	10"	Clay }	371.71
				1,550.63

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Broad st., Hanover to Main st.....	970	15"	Cem.	\$1,401.19
Brookline ave., North st., easterly.....	328	12"	Clay	29.57
Brooklyn ave., Sumner ave., southerly.....	171	10"	Clay	
Brown st., Yale to Bay st....	423	12"	Clay	329.56
	483	10"	Cem.	357.65
	21	8"	Cem.	
Brunswick st., Brooklyn ave., southerly.....	307	10"	Clay	190.48
Bryant st., Belmont to Sum- ner ave.....	274	15"	Clay	728.44
	301	12"	Clay	
	300	10"	Clay	
Buckingham place, Bay st., westerly.....	235	10"	Clay	168.97
Buckingham st., Bay to Clarendon st.....	651	12"	Clay	\$597.24
Bay st., southerly.....	35	12"	Cem.	
State to Bay st.....	305	18"	Clay	1,158.40
	345	15"	Clay	
	675	12"	Clay	
				1,755.64
Burr st., Andrew st., easterly	570	12"	Clay	459.03
Butler st., Chestnut to Cass st.....	1,268	20"	Clay	2,119.54
Cass st., easterly.....	321	20"	Clay	520.71
				2,640.25
Calhoun st., North Main to North st.....	853	12"	Clay	701.77
North st., easterly.....	300	8"	Clay	262.38
				964.15
Cambridge st., Bay st., southerly.....	276	20"	Clay	1,204.43
	331	18"	Clay	
	266	15"	Clay	
	302	12"	Clay	411.63
	278	10"	Clay	
				1,616.06
Card-factory pond (see pri- vate ways).				
*Crew st., Main st. to Gar- den brook (cost shown under Clinton st.).....	250	4'-6"x6'-9"	Brick	....
	32	5'-0" cir.	Brick	....
	1,456	4'-3" cir.	Brick	21,951.53
Garden brook to Prospect st.....	1,257	3'-0" cir.	Brick	
	791	2'-8" cir.	Brick	

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Massasoit st., easterly....	580	18"	Cem.	\$671.51
	200	12"	Cem.	153.28
Prospect to Armory st...	989	2'-8" cir.	Con.	8,513.49
	1,365	2'-6"x3'-9"	Con.	
Armory st., easterly.....	1,101	10"	Clay	2,400.86
	448	8"	Clay	
Liberty st., easterly.....	502	15"	Clay	
	499	12"	Clay	
	434	10"	Clay	
				\$3
Carlisle st., Wilbraham road, southerly.....	400	10"	Clay	
	246	8"	Clay	
Cass st., Liberty to Franklin st.....	500	12"	Clay	575.28
	163	10"	Clay	
Linden st., southerly.....	596	15"	Clay	892.07
Linden st., northerly.....	224	12"	Clay	
Catharine st., Dartmouth to McKnight st.....	833	2'-0"x3'-0"	Brick	4,428.92
State to McKnight st.....	348	15"	Clay	1,348.95
	438	12"	Clay	
	333	10"	Clay	
Cedar st., Pine to Walnut st.	180	3'-10"x5'-9"	Brick	889.35
	1,074	3'- 8"x5'-6"	Brick	6,206.73
Pine st., westerly.....	378	12"	Cem.	288.32
Cedar st., I. O., Main to river.....	433	2'-0"x3'-0"	Brick	2,001.44
Main to Centre st.....	274	12"	Clay	263.92
Cemetery brook (see private ways).				
Center street, Oak Grove ave., northerly.....	1,008	10"	Clay	
Centre st., I. O., Oak to Pine st.....	463	12"	Cem.	510.73
Pine to Cedar st.....	349	12"	Clay	668.19
	300	10"	Clay	
Cedar st., easterly.....	400	10"	Clay	371.71



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Central st., Main st., easterly	99	15"	Cem.	\$147.60
	546	12"	Cem.	385.49
Main to Maple st. ....	63	2'-0"x3'-0"	Brick	119.57
	463	2'-0"x3'-0"	Con.	2,332.17
	460	24"	Clay	2,665.22
	434	20"	Clay	
	581	18"	Clay	
near Maple st. to Sterns terrace. ....	105	12"	Clay	918.22
Sterns terrace to Cedar st.	334	18"	Cem.	199.95
Pine st., westerly. ....	500	12"	Cem.	102.50
Pine to Spruce st. ....	339	12"	Cem.	568.42
	335	12"	Clay	376.00
	310	10"	Clay	514.05
	861	20"	Clay	
Spruce to Hancock st. ....	597	2'-0"x3'-0"	Brick	
Hancock to Mill st. ....	40	24"	Clay	1,344.35
Mill st. to Mill river. ....				2,135.31
				136.83
				<u>\$11,945.68</u>
Chapel st., Eastern ave., easterly. ....	400	10"	Clay	208.13
Chapin terrace, Chestnut st., easterly. ....	327	15"	Clay	1,124.82
	279	12"	Clay	
Chase ave., Fort Pleasant ave., easterly. ....	238	12"	Clay	24.49
	333	10"	Clay	
Charles st., Liberty to Franklin st. ....	27	12"	Clay	647.16
	620	12"	Cem.	
Liberty st., southerly ....	29	12"	Clay	
				12.94
				<u>660.10</u>
Charter ave., Walnut st., easterly. ....	527	12"	Clay	475.20
Cherrellyn ave., Phoenix st., southerly. ....	300	15"	Clay	410.62
	651	12"	Clay	574.73
				<u>985.35</u>
Cherry lane, Mill river to Central st. ....	398	18"	Clay	1,454.15
	434	15"	Clay	
	251	12"	Clay	
	295	10"	Clay	
Cherryvale ave., Longhill st. to Florentine gardens	596	10"	Clay	15.74
Chester st., Mill st., northerly	459	12"	Clay	509.11
	161	10"	Clay	
	112	8"	Clay	
				<u>509.11</u>

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Chestnut st., Edwards st., southerly.....	575	12"	Cem.	\$579.02
Mattoon st., southerly ...	288	15"	Cem.	319.60
Pearl to Mattoon st.....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st.....	143	1'-8"x2'-6"	Brick	599.51
Bridge to Worthington st.	480	2'-0" cir.	Brick	.....
Worthington to Bridge st.	353	24"	Clay	1,148.06
Worthington to Taylor st.	60	18"	Cem. }	291.17
	244	12"	Cem. }	
	134	18"	Cem. }	
Lyman st. to B. & A. R.R.	72	12"	Cem. }	355.41
	500	12"	Cem.	
Franklin st., southerly. ...	397	12"	Cem.	358.75
Franklin st., northerly ...	374	15"	Cem.	294.14
Essex to Everett st.....	126	8"	Clay	586.72
Carew st., southerly. ....	424	24"	Clay }	1,618.64
Carew to Prospect st.....	537	20"	Clay }	
	220	12"	Cem.	
Prospect st., northerly ...	172	12"	Cem.	178.88
Bancroft st., southerly ...	108	12"	Clay }	123.00
	19	10"	Clay }	
Bancroft to Montmorenci st.....	391	15"	Cem.	535.24
Bancroft to Montmorenci st. (see Bancroft st.)...	.....	3'-2"x4'-9"	Brick	.....
Montmorenci to Waverly st.....	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly... ..	450	10"	Clay	385.61
Douglas to Springfield (see Springfield st.)....	.....	3'-6" cir.	Brick	.....
Merwin st., southerly....	178	10"	Clay	.....
Eagle st., northerly.....	87	15"	Clay	.....
Eagle st., southerly.....	171	10"	Clay	.....
Chestnut st., I. O., Worces- ter to Hampden st.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st.	307	15"	Clay	342.65
Church st., Garden brook to North st.....	556	18"	Clay	1,440.68
	80	15"	Cem.	157.23
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	84.12
	55	8"	Clay	6.89

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Clantoy st., Phoenix to Du- pont st.....	398 517 241	15" 12" 10"	Clay Clay Clay	\$1,130.95
Claremont st., Orange st., southerly.....	492	10"	Clay	
Clarendon st., Worthington st., westerly.....	205	10"	Clay	
Worthington to St. James ave.....	336	18"	Cem. }	\$225.80
St. James ave. to Sherman st.....	280	15"	Clay }	
	605	12"	Clay }	
				2,085.11
Clark st., Hancock st., west- erly.....	520	10"	Clay	531.80
Clayton st., Plainfield st., westerly.....	299 100	18" 15"	Clay Clay	583.76 163.91
				747.67
Clermont st., I. O., Healey ave., easterly.....	150	10"	Clay	123.28
Cleveland st., Armory to Liberty st.....	274 250 276 284	18" 15" 12" 10"	Clay Clay Clay Clay	790.48
Clifford st., Bay st., north- erly.....	250 119	12" 10"	Clay Clay	
Clifton ave., Central st., southerly.....	398	8"	Clay	
Cliftwood st., Sumner ave., southerly.....	464	10"	Clay	
Clinton st., Fulton to Boyl- ston st.....	150	10"	Clay	441.52
Boylston st., easterly ....	410	12"	Cem.	
submerged outlet.....	176	24"	W'd }	
	24	24"	C-ir. }	
Conn. river to Fulton st..	593	4'-10"x7'-3"		2,207.90
Fulton st., Clinton to Sar- geant st.....			Brick	26,137.87
Sargeant st., Fulton to Main st.....				
Carew st., Main st. to Garden brook.....				
(For lengths and sizes see individual streets.)....				
Clyde st., Plainfield st., westerly.....	350 350 271	18" 15" 12"	Clay Clay Clay	28,787.29 1,519.51

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Dartmouth st., St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick }	\$8,247.06
Yale to Bowles st.....	295	2'-6"x3'-9"	Brick }	
Dartmouth terrace, Worth- ington to Cornell st....	499	20"	Clay }	2,213.06
	357	18"	Clay }	
	177	15"	Clay }	
Davis court, Bridge st. to Harrison ave.....	450	12"	Clay	500.67
Dawes st., Bay st., southerly	229	15"	Clay }	207.36
	380	12"	Clay }	
	518	10"	Clay }	
Dawson ave., White street, westerly.....	350	10"	Clay	95.87
Daytona st., Belmont to Sumner ave.....	524	12"	Clay	500.44
Demond ave., Fisk ave., westerly.....	510	12"	Clay }	642.06
Plainfield st., easterly....	403	12"	Clay }	
Dexter st., Knox to Pine st..	558	12"	Cem.	\$60.83
	226	10"	Clay	245.10
Dickinson st., Mill st. to Sumner ave.....	35	4'-6" cir.	Brick }	44,552.11
	60	2'-1"x5'-0"	Con.	
	251	5'-0" cir.	Brick }	
	679	4'-0" cir.	Brick }	
	*460	4'-10"x7'-3"	Brick }	
	*869	4'-8"x7'-0"	Brick }	
	*1,040	4'-4"x6'-6"	Brick }	
	*996	4'-2"x6'-3"	Brick }	
Sumner ave., southerly ..	1,379	2'-6"x3'-9"	Brick }	8,760.53
	324	2'-4"x3'-6"	Brick }	
	434	2'-0"x3'-0"	Brick }	
	312	1'-10"x2'-9"	Brick }	
				53,312.64
Donald st., Birnie ave., east- erly.....	315	10"	Clay	406.60
Dorchester st., St. James ave. to Amherst st.....	364	12"	Clay }	417.70
	238	10"	Clay }	
Dorne st., Smith st., north- erly.....	219	12"	Clay	182.12
Douglas st., B.&M. R. R. to North Main st. (see Rowland ave.).....	....	....	....	....
North Main to Chestnut st.....	424	4'-6" cir.	Brick }	4,805.19
	442	4'-0" cir.	Brick }	

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Dresden st., State st., southerly.....	359 321	12" 10"	Clay } Clay }	\$25.14
*Dwight st., Sanford to State	258	2'-8"x4'-0"	Brick	\$1,571.86
Sanford to Harrison ave. .	253 229 199	20" 18" 15"	Clay } Clay } Clay }	1,441.27
Harrison ave., northerly..	129	12"	Clay	319.96
Hillman st., southerly....	226	10"	Clay	257.25
Hillman st., northerly....	103	10"	Clay	388.28
Worthington st., southerly	269	12"	Clay	433.91
Worthington st., northerly	342	12"	Cem.	374.73
				4,787.26
Dymon st., Walnut st., east- erly.....	415	12"	Cem.	385.92
Eagle st., North Main to Chestnut st.....	643	15"	Clay	....
East Court st., Dwight st., westerly.....	206 62	12" 10"	Clay } Clay }	303.10
East Hooker st., North Main to North st.....	444 255	10" 10"	Cem. Clay	39.04 ....
				39.04
Eastern ave., Watershop pond to Manhattan st. .	1,164	24"	Clay	2,164.43
Manhattan to Alden st. .	338	20"	Clay	636.21
Alden to Collins st.....	231	12"	Clay	313.99
Greene st., southerly....	125	8"	Clay	69.58
Greene to Ladd st.....	38	15"	Clay	67.21
Olive st., southerly .....	169	8"	Clay	167.87
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon to King st.....	194	12"	Cem.	351.89
	55	12"	Clay	95.43
King to Chapel st.....	152	10"	Cem.	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly.	312	12"	Cem.	256.78
Tyler st., northerly.....	286	12"	Cem.	181.30
Quincy st., northerly....	118	10"	Cem.	131.15
Monroe st., southerly....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
				5,309.25
Edgemont st., State st., northerly.....	499 201	10" 8"	Clay } Clay }	510.70

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
* Edgewood st., Acorn to Bay st.....	1,001	8"	Clay	
Edwards st., Chestnut st., easterly.....	551	12"	Cem.	
Elliott st., Salem st., south- erly.....	610 243	15" 12"	Cem. Cem.	\$730.48 341.98
Elm st., submerged outlet..	191	24"	Wood	1,700.75
	26	24"	C. Iron	359.80
Conn. river to Water st..	385	3'-9" cir.	Brick }	10,744.18
Water to Main st.....	996	3'-8"x5'-6"	Brick }	
Elmwood st., Main to Han- over st.....	300 249 299	18" 15" 12"	Clay Clay Clay }	
Emery st., Boylston st., east and west.....	542	12"	Cem.	
Essex street, Garden brook, westerly.....	418	15"	Cem.	355.00
Garden brook to Chestnut st.....	1,115 204	2'-2"x3'-3" 18"	Brick Cem.	7,105.10 355.38
Essex st., I. O., Oak to Myrtle st.....	254 426	12" 10"	Clay Clay }	662.28
Oak st., easterly.....	183	10"	Clay	248.28
Euclid ave., Belmont ave. to Dickinson st.....	389 741	12" 10"	Clay Clay }	1,102.00
	77	8"	Clay	50.67
† Dickinson st., westerly..	350	15"	Clay	773.10
	350	12"	Clay	
Dickinson st., easterly ...	275	10"	Clay	332.10
Everett st., Chestnut st. to brook.....	323	15"	Cem.	308.38
brook to Cass st.....	926	15"	Clay	821.48
Cass st., easterly.....	313	15"	Clay	617.48
Fairbanks place, Worthing- ton st., northerly .....	249	10"	Clay	
Fairfield st., Litchfield to Garfield st.....	376 556	12" 10"	Clay Clay	351.68

\* Sanitary sewer.

† Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Fairmount st., Common- wealth ave. to Lawn- dale st.....	350	10"	Clay	\$173.17
Farnsworth st., Hamburg st. to Chicopee line.....	530	20"	Clay	\$1,653.14
	279	18"	Clay	827.14
	248	12"	Clay	
	264	10"	Clay	2,480.28
Federal st., Worthington to Pearl st.....	567	12"	Cem.	740.92
Summer st., southerly ...	274	10"	Clay	172.00
				912.92
Ferry st., Main to Garden brook (see Cypress st.).	.....	.....	.....	.....
Garden brook to Chestnut st.....	1,168	2'-4"x3'-6"	Brick	5,417.12
Main st., easterly.....	*394	4'-2"x6'-3"	Con. }	11,067.29
	1,004	4'-9" cir.	Con. }	16,484.41
Firglade ave., Sumner ave. to Spruceland st.....	350	10"	Clay }	84.44
	203	8"	Clay }	
Spruceland to Pineywoods avenue.....	447	10"	Clay	.....
	67	8"	Clay	.....
Pineywoods ave. to Wash- ington boulevard.....	242	12"	Clay }	395.64
	176	10"	Clay }	480.08
Fisk ave., Rowland to Wor- cester ave.....	272	24"	Clay }	1,073.11
	275	20"	Clay }	
	298	10"	Clay }	
Wason ave., southerly....	299	24"	Clay }	1,216.81
	294	20"	Clay }	
	248	12"	Clay }	2,289.92
Florence st., Pine st., east- erly.....	824	15"	Cem. }	2,227.38
	651	12"	Cem. }	
Hancock st., easterly ....	253	10"	Cem.	323.93
	26	10"	Clay	31.11
				2,582.42
Florentine gardens, Piney- woods ave., northerly..	421	10"	Clay	22.83
Florida st., Worthington to Ingersoll Grove st....	555	15"	Clay }	978.89
	279	12"	Clay }	
Worthington to St. James ave.....	935	2'-2"x3'-3"	Brick	4,499.10
St. James ave. to Bay st.	599	24"	Clay	1,832.21
				7,310.20

\* Elliptical.

## SEWER SYSTEM.—

NAME OF SEWER.	Length in Feet.	Size.
Forest st., Belmont to Forest Park ave.....	419 255	12" 10"
Forest Park ave., Fort Pleas- ant ave. to Garfield st.	1,081 325 562	24" 20" 18"
Sumner ave., northerly ..	567	12"
Sumner ave., southerly...	66 438	10" 10"
Pineywoods ave., north- erly.....	380	10"
Fort st., Main to Water st..	633	12"
Fort Pleasant ave., Mill river to Sumner ave....	888 1,825	2'-4"x3" 2'-0"x3"
Mill st., southerly.....	428	12"
Foster st., Knox st., easterly	511 224	12" 12"
Franklin st., Garden brook sewer to Main st.....	434	18"
Garden brook sewer to Chestnut st.....	919 295	2'-2"x3" 20"
Chestnut to Charles st. ..	273	15"
Charles st., easterly.....	670	12"
Cass to Webster st. ....	621 70	12" 10"
Nursery st., westerly.....	207	15"
Nursery to Genesee st....	107 557 27	15" 15" 12"
Fremont st., Main to Water st.....	780	1'-6"x3"
Main st., westerly.....	656 30	12" 12"
Fulton st., Cypress to Clin- ton st.....	944	12"
*Clinton to Sargeant st. (cost shown under Clin- ton st.).....	1,080 42	4'-8"x3" 4'-10"x3"
Sargeant to John st. ....	555	15"
John st., northerly.....	314 408	12" 10"

\* Elliptical.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Garden brook sewer (see private ways).				
Gardner ave., Gardner st., northerly.....	151	8"	Clay	\$73.11
Gardner st., Hanover to Water st.....	655	2'-0"x3'-0"	Brick	\$1,995.23
Water to Main st.....	226	12"	Clay	423.58
	199	10"	Clay	
				2,418.81
Garfield st., Forest Park ave., easterly.....	556	15"	Clay	967.16
	514	12"	Clay	
Belmont ave., westerly...	531	10"	Clay	329.87
				1,297.03
Genesee st., Franklin st., southerly.....	200	10"	Clay	234.87
George st., Dexter st., south- erly.....	409	10"	Clay	344.52
Girard ave., Bay to Mc- Knight st.....	944	12"	Clay	863.45
Gordon st., Pasadena ave. to White st.....	618	15"	Clay	555.79
Governor st., Armory st. to Penacook ave.....	424	20"	Clay	
	401	18"	Clay	
	402	15"	Clay	1,276.19
	224	12"	Clay	
Grace st., Birnie ave., east- erly.....	274	15"	Cem.	51.56
Grand st., Revere st., east- erly.....	250	15"	Clay	
	252	12"	Clay	
Revere st., westerly.....	151	10"	Clay	
Grant st., Magazine to Ar- mory st.....	588	12"	Cem.	477.26
Granville st., Eastern ave. to Logan st.....	495	12"	Cem.	560.46
Gray's ave., Cypress ave., northerly.....	495	12"	Cem.	460.92
Greenacre sq. (north), Fos- ter st., easterly.....	201	10"	Clay	149.02
Greenacre sq. (south), Fos- ter st., easterly.....	246	10"	Clay	163.73
Greene st., Hancock to Eastern ave.....	610	18"	Cem.	
	793	15"	Cem.	1,897.68

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Green lane, Rimmon ave., westerly and northerly.	744 143	12" 10"	Clay Clay	.... ....
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	
Greenwich st., Birnie ave., easterly.....	300 300	12" 10"	Clay Clay	
Greenwood st., Garden brook to Main st.....	386 538	12" 15"	Cem. Clay	
Garden brook, easterly...	448	12"	Clay	
	117	10"	Clay	
Grenada terrace, Dickinson to Ventura st.....	220 310	18" 15"	Clay Clay	\$708.45
Ventura st., easterly.....	309 216	12" 10"	Clay Clay	397.28
Grosvenor st., North to Chestnut st.....	131 648	18" 15"	Cem. } Cem. }	
Grove st., North Main st., easterly.....	409	10"	Clay	
North st., westerly.....	270	10"	Clay	
Groveland ave., Dickinson st. to town line.....	533 117	12" 10"	Clay Clay	
Grover st., Armory to Lib- erty st.....	300 303 298 432	18" 15" 12" 10"	Clay Clay Clay Clay	
Hall st., Belmont ave. to Dickinson st.....	500 474	12" 10"	Clay Clay	904.55
*Dickinson st., southerly..	774	12"	Clay	698.29
Hamburg st., Springfield st., easterly.....	367 235	20" 10"	Clay Clay	
Hampden st., Water to Main st.....	569	15"	Cem.	
Hampden st., I. O. Chest- nut st., easterly.....	285 174	12" 12"	Cem. Clay	187.28 299.12
Holly st., easterly.....	150	10"	Clay	165.26
Pine st., westerly.....	200 199	12" 10"	Clay Clay	311.59

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Hampshire st., I. O., Oak st.,</b>	300	12"	Clay }	<b>\$633.59</b>
westerly .....	398	10"	Clay }	
Oak st., easterly .....	250	12"	Cem.	
Pine st., westerly .....	324	10"	Clay	
Myrtle st., westerly .....	300	10"	Clay	295.05
				<b>\$1,525.99</b>
<b>Hancock st., Mill river to</b>				
Central st. ....	920	12"	Clay	866.30
Central to Walnut st. ....	218	18"	Cem. }	1,838.57
	1,343	15"	Cem. }	
Walnut to Alden st. ....	122	12"	Cem.	88.00
Lebanon to Alden st. ....	827	2'-0"x3'-0"	Brick	5,009.61
Walnut (through Leb- anon) to Quincy st. ....	1,852	3'-6"x5'-3"	Brick }	21,668.02
Quincy to State st. ....	913	3'-4"x5'-0"	Brick }	
				<b>29,470.50</b>
<b>Hanover st., York to Gard- ner st. ....</b>	830	2'-2"x3'-3"	Brick	2,650.26
<b>Harriet st., North Main to</b>	250	15"	Clay }	377.17
North st. ....	207	12"	Clay }	
North st., easterly .....	330	10"	Clay	
				<b>550.09</b>
<b>Harrison ave., Main to</b>	600	15"	Cem.	874.11
Chestnut st. ....	250	8"	Clay	203.61
				<b>1,077.72</b>
<b>Harvard st., Yale st. to St. James ave. ....</b>	316	18"	Clay }	998.99
	300	15"	Clay }	
	291	12"	Cem.	
St. James ave. to Cornell st. ....	736	12"	Cem.	25.66
				<b>1,291.49</b>
<b>Hawley st., State st., south- erly. ....</b>	110	12"	Cem. }	280.57
Monroe st., northerly. ....	71	12"	Cem. }	
	330	10"	Clay }	
<b>Hawthorn st., Hancock st., westerly. ....</b>	441	12"	Cem.	480.95
<b>Hayden st., State st., north- erly. ....</b>	335	12"	Clay }	24.11
	299	10"	Clay }	
	222	8"	Clay }	
<b>Healey ave., I. O., Worces- ter st., southerly. ....</b>	326	15"	Clay	270.40
<b>Hebron st., North to Chest- nut st. ....</b>	663	12"	Clay	519.82

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
Hiawatha st., White st., westerly.....	383	10"	Clay	
Hickory st., Mill river inter- cepting sewer to Alden st.....	754	20"	Clay	
	228	18"	Clay	
	184	15"	Clay	
	788	12"	Clay	
High st., Maple st. to Ingraham ave.....	523	18"	Clay	
	567	15"	Clay	
	550	12"	Clay	\$1,958.9
Ingraham ave., easterly..	846	12"	Clay	987.7
Hillman st., Main to Dwight st.....	350	15"	Clay	
	380	12"	Clay	
Hillside place, Richelieu court, easterly.....	106	8"	Clay	
Holly st., I.O., Worcester to Hampden st.....	377	15"	Clay	419.1
Hampden st., southerly ..	175	12"	Clay	117.6
Hollywood st., Common- wealth ave., easterly...	211	12"	Clay	
	241	10"	Clay	445.8
Dickinson st., easterly...	174	10"	Clay	121.0
Holyoke st., Main st., west- erly.....	734	12"	Cem.	
Home st., Liberty st., west- erly.....	424	10"	Clay	302.2
Penacook ave., easterly...	246	10"	Clay	185.0
Homer st., State st., south- erly.....	31	12"	Clay	
	464	10"	Clay	
Horace st., Dickinson st., northerly.....	363	12"	Clay	
	411	10"	Clay	
Howard st., Main st., west- erly.....	344	15"	Clay	
	321	12"	Clay	837.2
Water st., easterly.....	276	12"	Cem.	255.7
	30	12"	Clay	43.4
Water st., westerly.....	314	12"	Cem.	326.9
	31	12"	Clay	43.4
Hubbard ave., Main st., easterly.....	257	15"	Clay	
	321	12"	Clay	
Hunt terrace, Allen st., northerly.....	304	10"	Clay	
Hunter place, State st., northerly.....	350	12"	Clay	
	313	10"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Huntington st., Birnie ave., easterly.....	300	12"	Clay	\$416.95
	300	10"	Clay	
Hyde ave., Fisk ave. to Plainfield st.....	301	15"	Clay	712.99
	300	12"	Clay	
	219	10"	Clay	
Ingersoll grove, Worthing- ton st., northerly.....	782	12"	Cem.	\$1,038.85
	218	8"	Clay	
Florida st., easterly.....	146	10"	Clay	71.14
Bowdoin st., easterly ....	132	10"	Clay	106.53
				1,216.52
Ionia st., State st., northerly	720	10"	Clay	445.92
Irvington st., Sumner ave. to Morningside Park ..	300	12"	Clay	180.95
	400	10"	Clay	
James st., Cedar st., north- erly .....	289	15"	Cem.	924.38
	534	12"	Cem.	
Jefferson ave., North Main to Chestnut st.....	299	20"	Clay	1,663.86
	299	18"	Clay	
See private ways also.	276	15"	Clay	
	60	12"	Clay	
	414	12"	Cem.	
	78	6"	Clay	492.50
				37.89
				2,194.25
John st., Fulton to Plain- field st. ....	652	12"	Cem.	420.18
Johnson st., Dickinson st. to Pasadena ave.....	1,964	18"	Clay	3,756.87
Johnson st., I. O., Main to South st.....	500	20"	Clay	1,254.26
	463	18"	Clay	
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay	1,106.40
	551	10"	Clay	
*Dickinson st., southerly.	350	15"	Clay	823.06
	301	12"	Clay	
	186	10"	Clay	
				1,929.46
Kensington ave., Oakland to Earl st.....	451	18"	Clay	1,179.27
	402	15"	Clay	
Earl st. to Pasadena ave..	567	12"	Clay	605.63
	260	10"	Clay	
				1,784.90
Kenwood park, Belmont ave., northerly.....	130	12"	Clay	139.96
	1,127	10"	Clay	
Kenwood terrace, Belmont to Sumner ave.	218	12"	Clay	305.66
	197	10"	Clay	

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Co
Kibbe ave., Summer to Worthington st.....	260	18"	Clay	
*Kibbe Hollow, northerly of Worthington st.....	447	24"	Clay	
King st., Walnut to Hancock st.....	504	15"	Cem. }	\$921.37
	441	12"	Cem. }	
Hancock to Logan st.....	311	20"	Clay }	2,650.91
	399	18"	Clay }	
	686	15"	Clay }	
	238	12"	Clay }	
	239	10"	Clay }	701.29
*Westford to Wilbraham ave.....	427	10"	Clay	321.81
Knox st., Mill river to Wind- sor st.....	830	15"	Cem.	113.58
	437	24"	Clay	1,144.10
Windsor st., southerly...	34	15"	Clay	47.88
Ladd st., Eastern ave. to Logan st.....	243	15"	Clay }	
	304	12"	Clay }	
Lafayette st., St. James ave. to Amherst st.....	582	12"	Clay }	
	21	10"	Clay }	
Laurel st., Conn. river to Plainfield st.....	888	18"	Cem.	2,303.07
	60	18"	Clay	282.48
	20	18"	Clay	44.62
Laverne ave., Bellevue to Marengo ave.....	211	10"	Clay	
Lebanon st. (see Hancock)		3'-6"x5'-3"	Brick	
Hancock st., westerly.....	158	2'-0"x3'-0"	Brick	1,495.77
Hancock to Eastern ave..	606	18"	Cem. }	1,842.70
	816	15"	Cem. }	
Ledyard st., Armory st., northwesterly.....	478	10"	Clay	
Lenox st., Sumner ave., southerly.....	465	10"	Clay	
Lester st., Sumner ave. to Vermont st.....	286	12"	Clay }	
	279	10"	Clay }	
Lexington ave., Chestnut to Massasoit st.....	668	12"	Clay	546.52
Massasoit st., easterly...	145	2'-0"x3'-0"	Con.	594.63

\* Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Leyfred terrace, Belmont ave., northerly.....	300 317	18" 15"	Clay } Clay }	\$957.30
Liberty st., Garden brook to Main st.....	118	12"	Clay	\$179.19
Garden brook to Chestnut st.....	70 172 967 171	1'-6"x1'-7" 12" 15" 8"	Brick } Cem. } Cem. }	1,101.78
Chestnut to Webster st...	784 659 684	2'- 4"x3'-6" 1'-10"x2'-9" 2'- 2"x3'-3"	Brick } Brick } Brick }	9,123.49
Webster to Armory st. ....	366 1,282 317 449	3'- 0"x4'-6" 2'- 2"x3'-3" 1'-10"x2'-9" 2'- 2"x3'-3"	Brick } Brick } Brick } Brick }	5,383.15 2,539.81
Armory to Home st .....	1,194 1,103 714	24" 18" 15"	Clay } Clay } Clay }	5,227.99
Lillian st., Oak st., easterly..	297	12"	Clay	23,555.41 232.47
Lincoln st., Magazine to Federal st.....	823	12"	Clay	676.54
Linden st., Chestnut to Cass st.....	470 862	18" 15"	Cem. } Cem. }	1,318.15
Litchfield st., Belmont ave. to Fairfield st.....	159	15"	Clay	335.11
Garfield st, northerly ...	69	6"	Clay	7.10
Locust st., York to Mill st.	84 364 636	3'-0"x4'- 6" 2'-9"x4'-1 1/4" 2'-3"x3'- 9"	Brick } Brick } Brick }	342.21 6,804.18
Logan st., Collins st., south- erly.....	97	10"	Clay	109.36
Collins to Ladd st.....	183	10"	Clay	140.36
Ladd st., northerly.....	88	10"	Clay	67.64
Granville st., northerly ..	200	10"	Clay	147.48
Lombard st., Water st., east- erly.....	500	12"	Cem.	464.84 376.60
Longfellow terrace, White st., westerly.....	246 200	12" 10"	Clay } Clay }	290.03

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost
Longhill st., submerged out- let.....	26 290 28	18" 18" 18"	Clay W'd C-ir. }	\$5,387.70
Conn. river to Washington ave.....	1,310	24"	Clay	
(See Washington ave.)..	346	2'-4"x3'-6"	Brick	
Washington ave., northerly	399	15"	Clay	1,027.66
	512	12"	Clay	
	160	10"	Clay	
Sumner ave., southerly ..	356	8"	Clay	386.61
Warner pl. to Sumner ave.	423	10"	Clay	379.51
Main st. to Warner place.	136	24"	Clay	2,608.25
	265	18"	Clay	
	350	15"	Clay	
	400	12"	Clay	
	240	10"	Clay	
	90	2'-0"x3'-0"	Con.	
				447.63
Loring st., Water st., easterly	607	12"	Cem.	733.41
	40	12"	Clay	48.34
Lowell st., Conn. river to Plainfield st.....	305 396 396 283	18" 15" 12" 10"	Clay Clay Clay Clay	
Lyman st., Main to Chestnut st.....	1,335	2'-0"x3'-0"	Brick	
Chestnut to Spring st.....	418	15"	Clay	
	302	15"	Cem.	
				6,113.12 1,783.33 695.83
Lyndale st., Belmont ave., northerly.....	350 300 324	15" 12" 10"	Clay Clay Clay	
Lyons st., I. O., Main st., northerly.....	261	18"	Clay	
Madison ave., Central st., northerly.....	250 287	12" 10"	Clay Clay	
Magazine st., Worthington to Lincoln st.....	682 249	18" 15"	Cem. Cem. }	



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Magnolia terrace, east side, Sumner to Spruceland ave.....</b>	620	10"	Clay	\$1,233.46
<b>west side, Sumner to Spruceland ave.....</b>	621	10"	Clay	
<b>overflow connection be- tween east and west side Washington to Spruceland ave.....</b>	62	8"	Clay	26.00
	362	24"	Clay	21.08
	602	12"	Clay	
				<hr/> \$1,280.54
<b>Main st., Pecousic ave. to Longhill st.....</b>	191	2'-4"x3'-6"	Con.	1,077.51
<b>Mill river to Mill st.....</b>	258	10"	Clay	342.25
<b>Locust to Mill st.....</b>	385	15"	Clay	1,809.52
	394	12"	Clay	
<b>Mill st., southerly.....</b>	55	15"	Cem.	96.72
<b>York st. to B. &amp; A. R. R.</b>	56	7'-0" cir.	Brick	20,812.99
	1,772	6'-6" cir.	Brick	
	906	5'-6" cir.	Brick	34,453.56
	990	5'-0" cir.	Brick	
	1,624	3'-4"x5'-0"	Brick	164.82
	864	2'-4"x3'-6"	Brick	
	263	12"	Clay	1,210.56
<b>Cypress to Emery st.....</b>	298	15"	Clay	
	270	12"	Clay	389.20
<b>Emery st., southerly.....</b>	278	12"	Cem.	
<b>Emery to Sargeant st.....</b>	341	24"	Clay	2,539.81
	442	20"	Clay	
	480	18"	Clay	62,896.94
	186	15"	Clay	
				<hr/> 62,896.94
<b>Main st., I. O., Chicopee river to Pine st.....</b>	2,321	2'-4"x3'-6"	Brick	7,636.81
<b>Pine to Cedar st.....</b>	500	18"	Cem.	870.78
	185	15"	Cem.	
	103	12"	Clay	128.49
<b>Cedar to Lyons st.....</b>	1,110	2'-0"x3'-0"	Brick	5,068.28
<b>Chicopee river through private land and Main st. to Beaudry st.....</b>	699	18"	Clay	1,530.17
	232	15"	Clay	
	212	10"	Clay	448.86
<b>Parker st., westerly.....</b>	409	12"	Clay	
<b>Lyons st., easterly.....</b>	205	24"	Clay	1,334.58
	245	18"	Clay	
	129	12"	Clay	17,017.97
				<hr/> 17,017.97

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C.
<b>Malden st., Allen st., south- erly.....</b>	542 291 494	15" 12" 10"	Clay Clay Clay	}
<b>Manhattan st., Eastern ave. to Walnut st.....</b>	290 645 205	15" 12" 10"	Clay Clay Clay	
<b>Maple st., State to Temple st.....</b>	315	18"	Clay	\$675.51
<b>Park to High st.....</b>	225	18"	Clay	51.55
<b>Union st., southerly.....</b>	515 135	18" 12"	Cem. Cem.	959.13
<b>Central st., southerly . . .</b>	33 388	18" 12"	Cem. Cem.	
<b>Pine st., northerly.....</b>	784 195 522	12" 15" 12"	Clay Cem. Cem.	160.95 1,289.58 1,093.44
<b>Mapledell st., State st., northerly.....</b>	337 300 346	15" 12" 10"	Clay Clay Clay	}
<b>Maplewood ter., Fort Pleas- ant ave., easterly.....</b>	682 329 178	15" 12" 10"	Clay Clay Clay	
<b>Marble st., Main st., easterly</b>	222 586 242	18" 15" 12"	Cem. Cem. Cem.	
<b>Marengo park, Belmont ave., easterly.....</b>	443 612 778	15" 12" 10"	Clay Clay Clay	}
<b>Margaret st., Water st., westerly.....</b>	520	12"	Cem.	540.89
<b>Water st., easterly.....</b>	825 30	12" 12"	Cem. Clay	855.32 31.41
<b>Marion st., Bay st., south- erly.....</b>	833	12"	Clay	915.66
<b>Chapin st., easterly.....</b>	94 319	10" 8"	Clay Clay	25.89

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Market st., State st., north- erly</b> .....	119	10"	Clay	....
<b>Sanford st., southerly</b> ...	200	12"	Clay	\$412.04
<b>Sanford st. to Harrison ave</b> .....	301	15"	Clay	1,197.72
	350	12"	Clay	
<b>Harrison ave., southerly</b> ..	154	12"	Cem.	....
				<hr/> \$1,609.76
<b>Marshall place (see Melrose st.)</b> .....				
<b>Mason place, Dickinson st., southerly</b> .....	200	12"	Clay	433.02
	276	10"	Clay	
<b>Mason st., State to Pease st.</b>	349	15"	Clay	746.99
	359	12"	Clay	
<b>Massachusetts ave., Wilbra- ham road, southerly</b> ..	300	15"	Clay	976.70
	300	12"	Clay	
	227	10"	Clay	
<b>Westford circle, northerly</b>				47.67
				<hr/> 1,024.37
<b>Massasoit place, Massasoit st., easterly</b> .....	381	12"	Clay	....
<b>Massasoit st., Carew st., northerly</b> .....	709	12"	Cem.	579.69
	131	10"	Clay	124.62
<b>Lexington ave., southerly</b>	300	12"	Clay	366.86
	298	10"	Clay	
<b>Montmorenci st. to Lex- ington ave</b> .....	354	2'-2"x3'-3"	Con.	1,468.20
<b>Montmorenci st., north- erly</b> .....	152	10"	Clay	113.14
<b>Pratt st., southerly</b> .....	149	10"	Clay	218.09
				<hr/> 2,870.60
<b>Mattoon st., Chestnut to Salem st</b> .....	356	1'-4"x2'-0"	Brick	778.21
	87	15"	Cem.	
<b>Maynard st., State st. to Shattuck ave</b> .....	431	15"	Clay	670.82
	400	12"	Clay	
<b>McKnight st., Catharine to Sherman st</b> .....	255	15"	Cem.	421.42
	30	15"	Clay	56.78
<b>Catharine to Bowles st</b> ...	141	10"	Cem.	67.27
	28	10"	Clay	75.32
<b>Bowles st. to Girard ave</b> ..	119	12"	Cem.	81.85
	263	10"	Clay	233.51
				<hr/> 936.15

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Mechanic st., Water st., westerly .....	302 20	12" 8"	Cem. Clay	\$205.25 72.99
				\$278.24
Medford st., Birnie ave., easterly .....	390 183	12" 10"	Clay } Clay }	367.29
Melrose st., sewer between Hickory and Melrose st. Eastern ave. to Walnut st.	429 263 558	18" 15" 10"	Clay } Clay } Clay }	1,577.08
Marshall place, Eastern ave. to Walnut st. ....	415 169	10" 8"	Clay } Clay }	
Cottage ave., Melrose st. to Marshall place .....	74	12"	Clay }	
Merrick ave., King st., southerly .....	275 24	12" 12"	Cem. Clay	48.50 29.26
				77.76
Merwin st., North Main to Chestnut st. ....	774	15"	Clay	.....
Middlesex st., Wilbraham road, southerly .....	296 304	15" 12"	Clay } Clay }	580.26
Mill river, intercepting sew- er, Mill river to Locust st. ....	370 691	5'-3" cir. 4'-0" cir.	Brick } Brick }	6,066.64
Locust to Hickory st. ....	587 131 1,743 779 1,611	4'-0" cir. 3'-6"x5'-3" 5'-9" cir. 4'-3" cir. 3'-3" cir.	Brick } Brick } Brick } Brick }	42,706.00
*in Mill and Hickory sts. *Hickory st. to Gunn square brook by north- erly shore of Water- shops pond .....	833 4,495	2'-2"x3'-3" 2'-2"x3'-3"	Brick Brick	9,355.23 45,545.71
				103,673.58
Mill st., Main st., easterly.	236	8"	Cem.	75.45
Locust to Pine st. ....	943	2'-6"x3'-9"	Brick	4,764.79
Knox to Maple st. ....	352	18"	Clay	668.24
Dickinson st., easterly..	325	24"	Clay	619.85
				6,128.33

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Monmouth st., Dorchester st., northerly and east- erly</b> .....	199	12"	Clay	\$218.15
	171	10"	Clay	121.75
<b>Yale st., westerly</b> .....	64	12"	Clay	45.95
	278	10"	Clay	281.47
<b>Berkeley st., northwesterly</b>	350	12"	Clay	235.62
				<hr/> \$902.94
<b>Monroe st., Hancock st. to Eastern ave.</b> .....	611	18"	Cem. }	
	789	15"	Cem. }	1,983.29
<b>Eastern ave. to Colton st.</b>	316	12"	Cem. }	
<b>Monson ave., Greene st., northerly</b> .....	200	8"	Clay	....
<b>Montmorenci st., Chestnut to Massasoit st.</b> .....	64	12"	Clay	74.82
	612	2'-10"x4'-5"	Con.	2,725.07
				<hr/> 2,799.89
<b>Montrose st., State to Burr st.</b> .....	338	15"	Clay }	
	217	12"	Clay }	75.74
	329	10"	Clay }	
<b>Mooreland ave., Carew st., northerly to Van Horn ave.</b> .....	601	18"	Clay }	
	301	15"	Clay }	1,467.66
	299	12"	Clay }	
	212	10"	Clay }	
<b>Morgan st., Garden brook to Main st.</b> .....	252	12"	Cem.	199.08
<b>Garden brook to North st.</b>	25	18"	Cem.	48.07
	634	18"	Clay	1,460.31
				<hr/> 1,707.46
<b>Morris st., Main st., easterly</b>	915	2'-0"x3'-0"	Brick	2,942.83
	496	12"	Cem.	359.07
				<hr/> 3,301.90
<b>Mountainview st., Forest Park ave., easterly</b> .....	297	12"	Clay }	
	297	10"	Clay }	28.19
<b>Mulberry st., Maple st., easterly and northerly</b>	426	15"	Clay }	
	270	12"	Clay }	873.04
	629	12"	Cem.	595.59
	246	10"	Clay	233.59
<b>west from Ridgewood ter- race</b> .....	144	15"	Clay	....
				<hr/> 1,702.22
<b>Murray Hill ave., Liberty st., northerly</b> .....	....	....	Clay	96.24
<b>Myrtle st., Card Factory Pond brook, northerly</b>	107	10"	Clay }	
	237	8"	Clay }	69.76

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Myrtle st., I. O., Main to</b>				
Worcester st.....	377	24"	Clay	\$1,003.44
Worcester st., southerly.	378	10"	Clay	355.34
Berkshire st., southerly ..	180	10"	Clay	189.63
Hampshire to Essex st....	275	10"	Clay	310.44
				<hr/> \$1,858.85
<b>Nelson ave., Greene st.,</b>				
northerly.....	90	12"	Cem.	27.96
Lebanon to King st.....	188	10"	Cem.	126.54
	67	10"	Clay	93.63
				<hr/> 248.13
<b>Nelson st., Nursery st.,</b>				
easterly.....	308	24"	Clay	....
<b>New st., E. Court st., north-</b>				
erly.....	237	12"	Cem.	213.02
Dwight st., westerly.....	33	8"	Clay	14.18
	164	10"	Clay	203.79
				<hr/> 430.99
<b>Newland st., Plainfield st.,</b>				
westerly.....	350	18"	Clay	1,735.99
	349	15"	Clay	
	251	12"	Clay	
<b>Newman st., Knox st., west-</b>				
erly.....	175	12"	Cem.	11.49
<b>Noel ave., Mill st., south-</b>				
erly.....	204	20"	Clay	569.64
	146	18"	Clay	
	300	15"	Clay	
<b>Norfolk st., Wilbraham road,</b>				
southerly.....	300	12"	Clay	566.08
	229	10"	Clay	155.85
				<hr/> 721.93
<b>North st., Ferry st., north-</b>				
erly.....	148	10"	Clay	223.34
Carew st., northerly.....	190	8"	Cem.	84.88
Church to Grosvenor st..	68	18"	Cem.	157.13
Morgan to Ringgold st...	198	18"	Cem.	356.84
Osgood to Hebron st.....	130	18"	Clay	426.85
	165	10"	Clay	
<b>Bancroft st. to Brookline</b>				
ave.....	302	18"	Clay	411.55
Bancroft st., northerly ...	153	12"	Cem.	217.15
	64	12"	Clay	
Jefferson ave., northerly..	233	8"	Clay	197.21
Calhoun st., northerly ...	256	8"	Clay	48.13
Waverly to Grove st. ....	362	12"	Clay	302.86
Harriet st., southerly ....	86	8"	Clay	....
Harriet st., northerly ....	150	10"	Clay	106.43
				<hr/> 2,532.37

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Northampton ave., Wilbraham road, southerly . .	1,101	12"	Clay.	\$830.79
Gunn square, northerly . .	126	10"	Clay	103.71
Gunn square to King st. . .	249	12"	Clay	325.24
	202	10"	Clay	
				<hr/> \$1,259.74
North Church ave., Cook's ave., easterly . . . . .	209	10"	Cem.	. . . .
Cook's ave., westerly (for cost see Cook's ave.) . .	133	10"	Cem.	
No. Main st., Morgan st., southerly . . . . .	232	8"	Clay	208.50
Morgan st., northerly . . .	173	8"	Clay	90.69
Osgood st., southerly . . .	199	10"	Clay	641.23
Arch to Osgood st. . . . .	730	15"	Cem.	713.66
*Arch st. to Jefferson ave. .	185	2'-2"x3'-3"	Brick	974.27
Jefferson ave. to Grove st. .	359	24"	Clay	2,568.01
	420	20"	Clay	
	285	15"	Clay	
	170	12"	Clay	
Grove st., northerly . . . .	551	1'-8"x2'-6"	Brick	226.45
Douglas to Harriet st. . . .	250	24"	Clay	1,874.35
Harriet to Waverly st. . . .	326	2'-4"x3'-6"	Brick	470.75
Douglas to Eagle st. . . . .	272	1'-10"x2'-9"	Brick	1,840.24
Eagle st., northerly . . . .	181	24"	Clay	538.21
Wason ave., southerly . . .	215	2'-0"x3'-0"	Brick	860.00
	349	1'-8"x2'-6"	Con.	1,577.72
Wason ave., northerly . . .	600	12"	Clay	462.77
Chicopee line, southerly . .	106	15"	Clay	184.06
				<hr/> 13,230.91
Norwood st., Main to Hanover st. . . . .	1,051	12"	Cem.	1,156.64
Nursery st., Liberty to Franklin st. . . . .	694	2'-8" cir.	Brick	2,284.52
Franklin st., northerly . .	587	2'-8" cir.	Brick	. . . .
				<hr/> 2,284.52
Oak st., Union to State st. .	741	2'-0"x3'-0"	Con.	3,092.11
Union to Tyler st. . . . .	220	18"	Clay	752.00
	268	15"	Clay	
Walnut to Tyler st. . . . .	177	18"	Clay	297.10
				<hr/> 4,141.21
Oak st., I. O., Chicopee river to Main st. . . . .	684	4'-0" cir.	Con.	4,353.51
north from Main st. . . . .	179	15"	Cem.	637.00
	171	12"	Cem.	
Main st., southerly . . . .	590	2'-2"x3'-3"	Brick	2,345.84
brick sewer to Hampshire st. . . . .	797	24"	Clay	1,652.79

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
Hampshire st., southerly.	285	18"	Clay	\$1,562.45
	300	15"	Clay	
	400	12"	Clay	
Oak Grove ave., State to Center st. ....	349	18"	Clay	.....
	327	15"	Clay	
	254	12"	Clay	
Center st., northerly .....	492	10"	Clay	198.85
Bay st., southerly .....	350	18"	Clay	1,089.41
	350	15"	Clay	
	301	12"	Clay	
	50	10"	Clay	42.81
Oakland st., Belmont ave., southerly .....	311	10"	Clay	330.77
Belmont ave. to Dickinson st. ....	895	24"	Clay	2,218.71
Dickinson to Orange st.	254	24"	Clay	1,619.25
	350	18"	Clay	
	170	12"	Clay	
	218	8"	Clay	110.79
Allen to Orange st. ....	625	18"	Clay	1,428.06
	304	15"	Clay	
	193	12"	Clay	
	404	10"	Clay	468.60
Sumner ave. to Garfield st.	280	12"	Clay	
	221	10"	Clay	
Olive st., Eastern ave., to Logan st. ....	540	10"	Clay	.....
Orange st., Oakland st., east- erly .....	583	8"	Clay	
White st., westerly .....	381	12"	Clay	
	649	10"	Clay	.....
White st., easterly .....	924	10"	Clay	
Orchard st., Plainfield st., westerly .....	325	20"	Clay	
	301	15"	Clay	.....
	297	12"	Clay	
	494	10"	Clay	
Orlando st., Sumner ave., southerly .....	127	12"	Clay	310.17
	240	10"	Clay	
Belmont ave., northerly ..	246	12"	Clay	
	193	10"	Clay	396.2
Orleans court, Orleans st., westerly .....	205	8"	Clay	.....



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Orleans st., Union st., north- erly.....</b>	39	12"	Cem.	<b>\$36.23</b>
	310	12"	Clay }	456.19
	330	10"	Clay }	
Tyler st., northerly.....	188	10"	Cem.	187.74
Pendleton ave., northerly.	231	12"	Cem.	327.73
				<b>\$1,007.89</b>
<b>Ormond st., Belmont to Sumner ave.....</b>	275	10"	Clay	252.85
<b>Osgood st., Garden brook to Main st.....</b>	257	12"	Cem.	320.94
Garden brook to North st.	588	18"	Cem.	1,261.32
	92	18"	Clay	174.87
				<b>1,757.13</b>
<b>Oxford st., Riverview ter- race, northerly.....</b>	63	12"	Clay	....
	227	12"	Clay }	512.94
	291	10"	Clay }	
				<b>512.94</b>
<b>Ozark st., Grand ave., southerly.....</b>	456	10"	Clay	61.80
<b>Palmer ave., Locust st., easterly.....</b>	351	18"	Clay }	1,190.78
	337	15"	Clay }	
	14	12"	Cem.	....
				<b>1,190.78</b>
<b>Park st., Main to Willow st.</b>	395	24"	Clay	1,609.31
Willow to Maple st.....	200	24"	Clay }	1,431.05
	557	18"	Clay }	
				<b>3,040.36</b>
<b>Parker st., I. O., Chicopee river to Main st.....</b>	32	24"	Clay }	261.81
	221	12"	Clay }	
Main st., southerly.....	1,098	24"	Clay	2,486.05
*Loon pond to B. & A. R.R.	1,227	12"	Clay	1,266.36
				<b>4,014.22</b>
<b>Parkside ave., Carew st. to Van Horn ave.....</b>	350	18"	Clay }	
	350	15"	Clay }	1,180.15
	351	12"	Clay }	
	300	10"	Clay }	
<b>Parkwood st., Sumner ave., southerly.....</b>	215	12"	Clay }	70.08
	204	10"	Clay }	
<b>Pasadena st., White st., southerly.....</b>	156	12"	Clay }	258.61
	291	10"	Clay }	

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
Pasco st., I. O., Essex st., southerly.....	724	10"	Clay	
Patton st., Garden brook to Main st.....	214	10"	Clay	\$173.7
Garden brook, easterly...	352	18"	Clay	1,572.6
	349	15"	Clay	
	537	12"	Clay	
Peabody lane, Willow st., westerly.....	292	10"	Clay	
Pearl st., Chestnut to Spring st.....	514	24"	Clay	1,792.6
	447	20"	Clay	
Spring st., easterly.....	190	1'-6" cir.	Brick	
Pease st., Catharine to Bowles st.....	250	12"	Clay	
Pecousic ave., Mill river to Main st.....	352	2'-8"x4'-0"	Con.	
Penacook ave., Governor to Home st.....	106	12"	Clay	
Pendleton ave., Walnut to Hancock st.....	287	18"	Cem.	1,663.9
	524	15"	Cem.	
	429	12"	Cem.	
Hancock st. to Eastern ave.....	600	18"	Cem.	1,494.5
	793	15"	Cem.	
Phoenix st., Liberty st., easterly.....	236	18"	Clay	
	250	15"	Clay	
	89	10"	Clay	
Pine st., Mill to Cedar st.	740	2'-6"x3'-9"	Brick	13,659.5
	1,529	3'-6"x5'-3"	Brick	
	500	3'-10"x5'-9"	Brick	
Cedar to Walnut st.....	62	18"	Cem.	1,781.6
	884	15"	Cem.	
	631	12"	Cem.	
Pine st., I. O., Main st., easterly.....	1,896	24"	Clay	
Pine st. court, Pine st., easterly.....	348	10"	Cem.	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Pineywoods ave., Washing- ton ave., northeasterly.	334	15"	Clay	.....
	263	12"	Clay	
Magnolia terrace, westerly	350	10"	Clay	
Magnolia terrace to Wash- ington road.....	343	20"	Clay	\$25.62
	404	12"	Clay	.....
Washington road to Forest Park ave.....	341	12"	Clay	.....
				\$25.62
Plainfield st., Sargeant to Fulton st.....	414	18"	Clay	2,525.13
	537	15"	Clay	
	456	12"	Clay	
	244	10"	Clay	
Washburn to West st....	154	12"	Clay	427.50
	203	10"	Clay	
Washburn to Roseland st.	331	2'-8"x4'-0"	Brick	1,555.00
	303	2'-6"x3'-9"	Brick	2,367.93
	287	2'-4"x3'-6"	Brick	4,518.58
	294	2'-2"x3'-3"	Brick	
Rowland to Division st..	648	2'-2"x3'-3"	Con.	3,402.82
	148	24"	Clay	535.51
Rowland st. to Talcott ave.....	288	24"	Clay	1,208.95
	299	20"	Clay	
Talcott ave., northerly...	216	10"	Clay	158.46
Wason to Demond ave...	304	24"	Clay	1,253.59
	249	20"	Clay	
	53	18"	Clay	
				17,953.47
Pleasant st., Bay st., south- erly.....	296	12"	Cem.	249.74
Plymouth st., Fulton st., easterly.....	375	10"	Clay	196.59
Pomona st., Sumner ave., northerly.....	580	12"	Clay	459.94
	297	10"	Clay	204.92
				664.86
Portland st., Birnie ave., easterly.....	251	12"	Clay	351.35
	224	10"	Clay	
Portsmouth st.....	212	12"	Clay	253.65
Pratt st., Chestnut to Marvin st.....	350	15"	Clay	869.53
	299	12"	Clay	

## SEWER SYSTEM.—C

NAME OF SEWER.	Length in Feet.	Size.
Prescott st., Belmont ave., northerly .....	340	10"
Prince st., King to Lebanon st.....	329	12"
Princeton st., Bay to Am- herst st.....	103 689 151	18" 18" 15"
Yale to Vassar st.....	665	12"
St. James ave. to Cornell st.....	298	12"
Private ways and private lands:		
Armory Hill sewer from Armory st., through pri- vate grounds east of Ar- mory st. to Worthington st.....	150 900 249	2'-5"x3'- 2'-8"x4'- 2'-1"x3'-
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts.....	751	12"
in front and around High school.....	492	24"
High school to State st..	88	24"
Cemetery brook, Morris st., easterly, north of Central st.....	174	24"
Chester to Hancock st..	218	8"
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch st. about 300 feet east of Main st.....	2,936 766 1,303 236	5'-6" ci 5'-0" ci 4'-6" ci 3'-0"x4'
Worthington st., north- easterly to Lyman st., thence via Railroad land to Armory st.....	3,274 952	4'-7½" c 4'-1" ci
Hickory to Melrose st. (see Melrose st.)	.....	18"

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Jefferson ave., passage way in rear of lots on south side.....	135 518	2'-0"x3'-0" 12"	Brick Cem.	\$364.84
Main to Dale st., between Hubbard ave. and Wil- liam st.....	655	12"	Cem.	441.92
Passage way, Ferry to Liberty st., 80 ft. east of Main st.....	210	12"	Clay	402.70
Potter place, State st., northerly.....	396 301 274	15" 12" 10"	Clay Clay Clay }	.....
Sewer in ave. Hampden st. southerly, near Water st.....	111	12"	Clay	147.14
Springfield st. and Glen- wood, via Atwater Glen	677 598 389 1,292 40 16 1,294	3'-6" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10"x4'-3" 24"	Brick Brick Brick Brick Brick Brick Clay }	14,614.89 3,889.98 18,504.87
Prospect st., Chestnut to Massasoit st.....	218 199 196	18" 15" 12"	Clay Clay Clay }	623.53
Massasoit st., easterly...	325 423	12" 10"	Clay Clay }	726.53 1,350.06
Pynchon st.....	950	2'-0"x3'-0"	Brick	3,108.02
Quebec st., I. O., Lyons st., easterly.....	209	15"	Clay	402.82
Queen st., Walnut to Han- cock st.....	634	12"	Cem.	634.22
Quincy st., Oak to Stebbins st.....	860	12"	Cem.	651.15
Hancock to Stebbins st...	522	12"	Cem.	549.58
Hancock st. to Eastern ave.....	637 765 208	18" 15" 10"	Cem. Cem. Clay }	1,766.39 156.87 3,123.99
Colton st. to Eastern ave.				

## SEWER SYSTEM.—C

NAME OF SEWER.	Length in Feet.	Size.
Railroad st., Water st., easterly.....	351	12"
Randolph st., Maplewood terrace, easterly.....	250	12"
	251	10"
Ranney st., Wilmont st., northerly.....	200	10"
Kensington ave., north- erly.....	206	10"
Rapalus ave., I. O., Parker st., southerly.....	442	12"
Raymond ave., Carew st., northerly.....	277	10"
Reed st., State st., southerly	219	12"
	309	10"
Revere st., White st., south- erly.....	750	20"
	250	10"
	209	8"
Richelieu court, Adams st., southerly.....	160	12"
	315	10"
Richelieu place, Richelieu court, easterly.....	100	8"
Ridgewood place, Mulberry st., northerly.....	400	12"
	76	10"
Ridgewood terrace, Mul- berry st., westerly.....	226	10"
Union st., southerly.....	137	10"
Rimmon ave., Green lane to Weaver ramble.....	859	18"
Weaver ramble, north- erly.....	200	12"
Ringgold st., North to Chestnut st.....	117	18"
	632	12"
Ripley place, St. James ave., southerly.....	230	10"
Riverview st., Riverview ter- race to Chase ave.....	63	10"
	310	10"
Forest Park ave., south- erly.....	299	10"

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Riverview terrace, Fort Pleasant ave., easterly	298 322 105	15" 12" 10"	Clay } Clay } Clay }	....
Rochelle st., Wilbraham road, southerly.....	424	18"	Clay	\$452.68
Rogers ave., I. O., Main st., southerly.....	97 152	15" 12"	Clay } Clay }	312.13
Roseland st., Plainfield st., westerly.....	350 350 173	18" 15" 12"	Clay } Clay } Clay }	1,352.31
Rowland st., Conn. river to North Main st., includ- ing 630' in Douglas st. .	579 51 1,247 1,330	5'-3" cir. 1'-8"x2'-6" 6'-6" cir. 6'-0" cir.	Brick } Brick } Brick } Brick }	32,489.36
Rutland st., Wilbraham road to State st.....	199	8"	Clay	147.15
Rutledge ave., Main st., easterly .....	574	24"	Clay	49.43
Sachem st., Dickinson st., northerly.....	330	10"	Clay	345.31
Salem st., Pearl st., south and east.....	283 99 290	18" 15" 12"	Cem. } Cem. } Cem. }	804.72
*Sanford st.....	536	3'-2"x4'-9"	Brick	4,014.47
*Sargeant st., Fulton to Main (cost shown under Clinton st.).....	920	4'-6"x6'-9"	Brick	....
School st., Union to Mul- berry st.....	560	15"	Clay	\$620.95
Union st., northerly.....	258	10"	Clay	256.85
				877.80
Scott st., White to Pomona st.....	300 347	12" 10"	Clay } Clay }	468.68
Searle place, Walnut st., easterly.....	178	10"	Clay	231.61
Seventh st., Fulton to Main st.....	830	12"	Cem.	700.00
Sewer in avenue (see private ways).				
Sewer (see private ways).				
Sharon st., Garden brook to Main st.....	360	15"	Cem.	762.77
Garden brook, easterly...	601 463	18" 12"	Cem. } Cem. }	1,273.96
				2,036.73

\* Elliptical.



## SEWER SYSTEM.—C

NAME OF SEWER.	Length in Feet.	Size.
Shattuck st., Maynard st. to	200	10"
Willard ave.....	143	8"
Willard ave., easterly ....	50	8"
Shefford st., Springfield st.,	293	12"
westerly.....	350	10"
Sheldon st., Birnie ave. to	311	12"
N. Main st.....	317	10"
Sherman st., Bay to Clarendon st.....	175	12"
Bay to McKnight st.....	443	12"
State to McKnight st.....	301	18"
	301	15"
	544	12"
Shillingford st., Eastern ave. to Sheffield st.....	640	12"
Silver st., Armory st., easterly.....	302	15"
	297	12"
Smith st., Knox to Dorne st.	199	12"
Dorne st., westerly .....	107	10"
Sorrento st., Sumner ave., northerly.....	325	12"
Grenada terrace, northerly	367	10"
Spencer ave., Sumner ave., southerly.....	282	12"
	315	10"
Spring st., south from Lyman st.....	281	15"
	130	12"
Worthington to State st..	470	18"
	640	15"
	644	12"
Worthington st., northerly	132	12"
Worthington to Summer st.....	183	5'-0" ci
* .....	49	4'-3"x6'
Springfield st., Atwater terrace, northerly .....	892	20"
	360	18"
	413	15"
	286	12"
	437	10"

\* Segmental.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Springfield st. and Glen- wood (see private ways).				
Spruce st., Central st., northerly.....	600	12"	Cem.	\$609.90
Spruceland ave., Magnolia terrace, westerly.....	67	8"	Clay	.....
Beechwood ave., easterly..	242	8"	Clay	\$136.48
Beechwood ave., westerly..	299	8"	Clay	94.83
Longhill st., easterly.....	450	10"	Clay	410.40
				641.71
Stafford st., Armory st., westerly.....	402	10"	Clay	239.85
State st., Water st., westerly	70	12"	Cem.	45.27
	91	12"	Cem.	71.19
	82	12"	Clay	83.01
Water to Main st.....	907	18"	Clay	1,199.78
Main to Dwight st.....	636	18"	Clay	1,433.50
*Dwight st. to High school	29	2'-8"x4'-0"	Brick	4,897.66
	265	2'-2"x3'-3"	Brick	
	417	2'-0"x3'-0"	Brick	
At High school, connecting old with new.....	54	24"	Clay	161.88
High school to Elliott st..	305	2'-0" cir.	Brick	469.65
High school to Walnut st..	726	2'-0"x3'-0"	Con.	6,442.79
	306	2'-2" cir.	Con.	
	1,440	2'-0" cir.	Con.	
connecting new with old..	54	18"	Clay	1,678.37
Walnut to Oak st.....	250	18"	Clay	
	253	15"	Clay	
	348	12"	Clay	1,062.40
Federal st., easterly.....	695	2'-0" cir.	Brick	
	130	12"	Clay	274.35
Oak to Buckingham st....	2,110	18"	Cem.	2,819.99
Hancock to Sherman st....	1,147	3'-4"x5'-0"	Brick	13,555.85
Sherman to Chapin st....	492	3'-0"x4'-6"	Brick	
Chapin to Andrew st.....	726	3'-0"x4'-6"	Brick	
Andrew st. to Oak Grove ave.....	937	2'-10"x4'-3"	Brick	10,793.96
east from Oak Grove ve. to Cortland st.....	548	2'-4"x3'-6"	Brick	5,042.79
	283	2'-2"x3'-3"	Brick	
	352	2'-0"x3'-0"	Brick	
Cortland st., easterly ....	355	24"	Clay	4,586.74
	112	18"	Clay	
	3,399	12"	Clay	
				54,619.18

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	C
Stearns square (west road- way), Bridge st., north- erly.....	172	12"	Clay	
Stearns square (east road- way), Bridge st., north- erly.....	167	8"	Clay	\$67.0
Worthington st., southerly	148	12"	Clay	342.9
Stebbins st., Union to State st.....	300 293	12" 10"	Clay Clay	
Sterns terrace, Central st., northerly.....	393	12"	Clay	
St. James ave., State st., northerly.....	191 467 123	18" 12" 10"	Clay Clay Clay	906.0
Bay st. to Ripley ave. ....	91	12"	Cem.	135.2
Florida st. to Ripley ave.	469	12"	Cem.	500.8
Florida st., northerly ....	417 300	18" 12"	Cem. Cem.	1,073.9
Clarendon to Westminster st.....	248	15"	Cem.	404.6
Clarendon st., northerly ..	138	8"	Clay	64.8
Dartmouth to Harvard st.	385	2'-0"x3'-0"	Brick	2,738.5
Harvard to Princeton st. .	528	24"	Clay	1,587.4
Princeton st., northerly ..	308 249 57	18" 15" 12"	Clay Clay Clay	965.5
Stockbridge st., Main st., easterly .....	777	18"	Cem.	
Suffolk st., Wilbraham road, southerly .....	300 300 795	15" 12" 10"	Clay Clay Clay	294.0 596.5
Sullivan st., Armory st., easterly .....	395	12"	Clay	
*Summer st., Spring to Ar- mory st.....	44 † 1,344 † 1,093 † 750	4'-3"x6'-0" 4'-2"x6'-3" 2'-10"x4'-3" 3'-8"x5'-6"	Brick Brick Brick Brick	
Sumner ave., Fort Pleasant ave. to Longhill st. ....	448 358	12" 10"	Clay Clay	815.2

\* Segmental. † Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Fort Pleasant ave. to Ran- dolph st.....	673	2'- 0"x3'-0"	Brick	\$7,968.46
Randolph st. to Washing- ton road.....	360	1'-10"x2'-9"	Brick	
Washington road to Forest Park ave.....	360	1'- 8"x2'-6"	Brick	
Forest Park ave. to Green- leaf st.....	367	1'- 6"x2'-3"	Brick	
Greenleaf st. to Belmont ave.....	355	20"	Clay	2,915.88
	851	18"	Clay	
	736	15"	Clay	
	272	12"	Clay	
	426	10"	Clay	
Belmont ave., easterly...	100	8"	Clay	37.49
*Dickinson to White st....	2,219	2'-8"x4'-0"	Brick	11,531.37
White st. to Castle ave....	565	2'-2"x3'-3"	Brick	2,391.46
	1,110	2'-2"x3'-3"	Con.	2,246.16
	739	15"	Clay	1,645.60
	879	12"	Clay	
				\$29,551.66
Sumner terrace, Sumner ave., northerly.....	252	12"	Clay	440.44
	220	10"	Clay	
†Sycamore st., Acorn to Bay st.....	899	8"	Clay	352.24
Symonds ave., Worthington to Bridge st. (includes cost of Bond pl.).....	300	15"	Cem.	696.89
Talcott ave., Fisk ave. to Plainfield st.....	362	15"	Clay	549.57
	316	12"	Clay	
Taylor st., Main to Chestnut st.....	330	20"	Clay	2,099.63
	321	18"	Clay	
	197	15"	Clay	
	50	12"	Clay	
	341	12"	Cem.	51.79
				463.50
				2,614.92
Temple st., Maple to School st.....	304	15"	Clay	1,127.60
	300	12"	Clay	
	345	10"	Clay	
outlet into High school sewer.....	169	15"	Clay	171.71
				1,299.31
Tenth st., Garden brook, easterly.....	300	18"	Clay	1,256.39
	302	15"	Clay	
	421	12"	Clay	
	4	8"	Clay	

\* Elliptical. † Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Terrence st., Union to State</b>				
st.	374	12"	Clay	8565.36
	313	10"	Clay	
	48	10"	Cem.	
<b>Thomas st., Birnie ave.,</b>				
easterly	451	10"	Clay	
<b>Thompson st., Worthington</b>				
st., southerly	605	12"	Cem.	638.27
St. James ave. to Bay st.	703	15"	Cem.	749.22
State to Bay st.	852	12"	Cem.	655.12
<b>Thorndyke st., Sumner ave.,</b>				
southerly	116	12"	Clay	15.46
<b>Tracy st., Franklin st.,</b>	14	10"	Clay	
southerly	262	10"	Clay	
<b>Trenton st., Dickinson st.</b>				
to Commonwealth ave.	146	10"	Clay	1,202.67
<b>Tyler st., Oak to Hancock st.</b>	717	15"	Cem.	
	663	12"	Cem.	
Hancock st. to Eastern ave.	601	18"	Cem.	815.47
	795	15"	Cem.	718.71
Eastern ave. easterly	251	10"	Cem.	199.75
<b>Union st., submerged outlet</b>	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
(Con. river to Main st.)	1,610	3'-4" x 5'-0"	Brick	8,806.18
	53	2'-0" x 3'-0"	Brick	
Main to Oak st.	718	3'-2" x 4'-0"	Col.	
	951	2'-8" x 3'-0"	Col.	15,447.59
	1,021	2'-3" x 3'-0"	Col.	
	1,504	2'-4" x 3'-6"	Col.	
Oak to Orleans st.	404	15"	Cem.	7,638.58
Hancock to Stebbins st.	261	2'-0" x 3'-0"	Brick	467.90
	335	11'-10" x 2'-0"	Brick	2,307.33
Stebbins to Orleans st.	428	20"	Clay	737.72
Hancock st. to Eastern ave.	600	18"	Cem.	1,535.40
	800	15"	Cem.	
Eastern ave. easterly	248	10"	Clay	152.56
<b>Vassar st., Hartman st.,</b>				
northern	550	12"	Cem.	
<b>Ventura st., Sumner ave.,</b>				
northern	351	10"	Clay	289.51
Grenada terrace northerly	341	10"	Clay	225.28

\* Elliptica.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Vermont st., Converse to Pomona st.....	258 267 225	15" 12" 10"	Clay Clay Clay	\$524.78
Vernon st., Water st., east- erly.....	639	15"	Cem.	
Main st., westerly.....	216	12"	Cem.	
Vine st., Main to Fulton st.	697	12"	Cem.	1,148.60 688.75
Vinton st., Liberty to Frank- lin st.....	357 262	12" 10"	Clay Clay	393.47 252.13
Walden st., Dickinson st., easterly.....	166	8"	Clay	94.93
Commonwealth to Bel- mont ave.....	296	10"	Clay	148.67
Walker st., Water st., west- erly.....	650	12"	Clay	243.60 688.37
Walnut st., south from State st.....	69	1'-6"x1'-8"	Brick	85.23
north from Charter ave...	292	10"	Clay	418.30
Union st. to Charter ave...	279	12"	Cem.	482.50
Union to Oak st.....	558	12"	Clay	792.64
	17	12"	Cem.	20.50
Cedar to Pine st.....	1,142	2'-0"x3'-0"	Brick	4,956.57
Pine to Oak st.....	254	18"	Cem.	383.04
Hancock to Cedar st....	784	15"	Cem.	1,269.67
Hancock st., southerly...	180	12"	Cem.	
north from Manhattan st.	249	10"	Clay	
Florence st., northerly...	53	8"	Cem.	27.12
Hickory to Florence st....	1,026	12"	Clay	992.67
Walter st., Birnie ave. to No. Main st.....	385	12"	Clay	9,640.59 422.74
Waltham ave., Wilbraham road, southerly.....	911	12"	Clay	928.30
Wareham st., Grand ave., southerly.....	419	10"	Clay	21.24
Warner st., Fort Pleasant ave. to Longhill st.....	508 198 89	12" 10" 10"	Clay Clay Clay	51.88
Warriner ave., Locust st., easterly.....	448	12"	Clay	
Washburn st., Conn. river to B. & M. R. R.....	1,758	7'-0" cir.	Brick	
				21,678.46

## SEWER SYSTEM.—

NAME OF SEWER.	Length in Feet.	Size.
Washington boulevard, Longhill st. to Piney- woods ave.....	304 823 308 200 242 330	2'-4"x3" 2'-2"x3" 18" 15" 12" 10"
Washington road, Sumner ave., southerly.....	460	10"
Pineywoods ave., north- erly.....	141 281	10" 10"
Wason ave., Conn. river to Plainfield st.....	451	3'-10"x5"
Plainfield st. to Fisk ave.	1,051	3'- 4"x5"
Fisk to Birnie ave.....	634	3'- 2"x4"
Birnie ave. to North Main st.....	247	2'- 0"x3"
Water st., Gardner to Lor- ing st.....	474	1'-10"x2"
Loring st., northerly.....	345	12"
Union to Margaret st....	721	2'- 0"x3"
Union st., northerly.....	868	18"
Elm to State st.....	275	18"
Elm to Pyncheon st.....	43 498	2'- 0"x3" 2'- 6"x3"
Pyncheon st., northerly ...	257 329 61	18" 15" 12"
Worthington st., southerly	209	10"
Worthington to Hampden st.....	327	15"
Hampden to Railroad st.	321	12"
Waverly st., North Main to Chestnut st.....	473 487	20" 10"
Weaver ramble, Rimmon ave., westerly and northerly.....	480	12"
Webster st., Liberty to Franklin st.....	601	12"
Welcome place, Bay st., northerly.....	238	8"

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Wellesley st., St. James ave. to Cornell st. ....	236	12"	Clay	\$540.30
	224	10"	Clay	
Wellington ave., Wilbraham road, southerly.....	287	15"	Clay	
	244	12"	Clay	
	291	10"	Clay	23.58
Wendell ave., Main st., east- terly.....	458	15"	Clay	....
Westernview st., Forest Park ave., easterly.....	468	12"	Clay	539.60
	138	10"	Clay	
Westford ave., Wilbraham road, southerly.....	300	15"	Clay	
	300	12"	Clay	
	350	10"	Clay	\$676.23
*Westford circle to King st.	541	12"	Clay	454.36
				1,130.59
Westminster st., Bay to State st.....	300	15"	Clay	705.11
	300	12"	Clay	
	201	10"	Clay	
	773	12"	Cem.	
St. James ave., southerly .				794.10
				1,499.21
White st., Allen to Orange st.	747	24"	Clay	1,717.86
	674	20"	Clay	1,490.97
	274	18"	Clay	
Orange st. to Dawson ave.	388	15"	Clay	
	292	15"	Clay	
Gordon st. to Dawson ave.	192	10"	Clay	275.73
Gordon st., southerly.....	690	12"	Clay	212.77
	207	8"	Clay	671.32
Sumner ave. to Lawrence st.....	1,266	24"	Clay	84.45
Sumner ave., southerly...	1,028	20"	Clay	1,828.15
				1,719.01
Whitney ave., Water st., westerly.....	450	12"	Cem.	8,389.53
				257.32
Whittier ave., Sumner ave. to Longfellow terrace .	301	18"	Clay	1,261.63
	299	15"	Clay	
	301	12"	Clay	
	221	10"	Clay	
Wilbraham ave., Wilbraham road, southerly.....	1,125	12"	Clay	1,020.78
Alden to Beverly st.....	999	10"	Clay	1,121.36
	1,180	8"	Clay	
				2,142.14

\* Sanitary sewer.

## SEWER SYSTEM.—

NAME OF SEWER.	Length in Feet.	Size.
Wilbraham road, State st., easterly.....	248	12"
State st. to Northampton ave.....	1,451	2'-0"x3
Northampton ave. to Bristol st.....	472	2'-6"x3
	476	2'-4"x3
	478	2'-2"x3
	473	2'-0"x3
	254	1'-10"x2
	256	1'-8"x2
Bristol st., easterly ....	263	20"
	405	12"
Wilcox st., Water st., east- erly.....	548	15"
Water st., westerly.....	327	12"
	463	12"
Willard ave., State st., northerly.....	282	18"
	300	15"
	241	12"
Shattuck ave., southerly..	215	8"
William st., Water to Main st.....	875	12"
	32	12"
Main to Dale st.....	351	12"
	288	10"
Water st., westerly.....	76	15"
	425	12"
Willow st., Cross to State st.	413	12"
Cross to Park st.....	265	12"
Union to Park st.....	216	18"
Union st. to Hubbard ave.	219	10"
Wilmont st., Dickinson to Revere st.....	349	18"
	450	15"
	386	12"
Winchester st.....	424	12"
Windsor st., Knox st., west- erly.....	308	12"
	266	10"



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Winthrop st., Main st., east- erly . . . . .	52 141 310 230	18" 13" 13" 12"	Cem. Cem. Clay Clay	\$220.51 1,043.76 \$1,268.37
Wolcott st., Armory st., northerly . . . . .	220 206	10" 10"	Clay Clay	192.49 192.49
Woodside terrace, Belmont ave., northerly . . . . .	431	10"	Clay	321.97
Forest Park ave., north- erly . . . . .	307	10"	Clay	321.97
Worcester ave., Plainfield st. to Fisk ave. . . . .	834	13"	Cem.	136.04
Worcester st., I. O., Myrtle to Chestnut st. . . . .	4 200 382	24" 20" 2'-4"x3'-4"	Clay Clay Brick	943.80 1,283.00 2,398.00
Chestnut to Holly st. . . . .	670	1'-10"x2'-4"	Brick	342.03
Oak st., easterly . . . . .	273 212	12" 10"	Clay Clay	768.42 344.06
Pine st., easterly . . . . .	346 224 340	20" 18" 13"	Clay Clay Clay	310.13 0,703.03
Worthington st., submerged outlet . . . . .	194 22	24" 24"	Wood C. Iron	1,883.04 170.23
*Conn. river to Main st. . . . .	1,038	3'-7"x7'-4"	Brick	33,410.12
*Main to Dwight st. . . . .	821	3'-4"x7'-4"	Brick	
Dwight to Garden brook . . . . .	500	4'-0"x6'-4"	Brick	
Garden brook to Spring st. Spring st., branch north . . . . .	738 35	4'-3" cir. 3'-0" cir.	Brick Brick	4,361.35
Spring st., branch south . . . . .	47	2'-0"x3'-4"	Brick	
Spring st., easterly . . . . .	40 242 251	18" 13" 12"	Cem. Cem. Cem.	614.35
Autumn st., westerly . . . . .	113	12"	Cem.	118.78
near Sacketts ave. . . . .	145	10"	Cem.	111.47
West brook, easterly . . . . .	320 217	15" 12"	Clay Clay	1,110.54
West brook to Autumn st. Sacketts ave., westerly . . . . .	231 68	15" 12"	Clay Clay	727.50 207.28
Sacketts to Kibbe ave. . . . .	337	12"	Cem.	335.37
Kibbe ave. to Federal st. Kibbe hollow, westerly to Magazine st. . . . .	704 107	15" 18"	Clay Clay	820.00 381.28

\* Elliptical.

**SECRET SYSTEM - INFORMATION**

[illegible]

1. The following information is being furnished to you for your information only. It is not intended to be used for any other purpose.

## RECAPITULATION BY SIZES.

DESCRIPTION.	Length in Feet.	Size.	Material.
Segmental .....	93	6'- 0"x4'- 3"	Brick and cem. mortar.
Elliptical shaped .....	1,038	5'- 7"x7'- 0"	" " "
" " .....	821	5'- 4"x7'- 0"	" " "
" " .....	1,095	4'- 10"x7'- 3"	" " "
" " .....	1,949	4'- 8"x7'- 0"	" " "
" " .....	1,170	4'- 6"x6'- 9"	" " "
" " .....	1,040	4'- 4"x6'- 6"	" " "
" " .....	2,340	4'- 2"x6'- 3"	" " "
" " .....	1,746	3'- 8"x5'- 6"	" " "
" " .....	830	3'- 4"x5'- 0"	" " "
" " .....	536	3'- 2"x4'- 9"	" " "
" " .....	819	3'- 0"x4'- 6"	" " "
" " .....	1,093	2'- 10"x4'- 3"	" " "
" " .....	2,506	2'- 8"x4'- 0"	" " "
" " .....	5,778	2'- 2"x3'- 3"	" " "
" " .....	417	2'- 0"x3'- 0"	" " "
Egg shaped .....	566	4'- 0"x6'- 0"	" " "
" " .....	1,131	3'- 10"x5'- 9"	" " "
" " .....	1,074	3'- 8"x5'- 6"	" " "
" " .....	3,512	3'- 6"x5'- 3"	" " "
" " .....	359	3'- 4"x7'- 2"	" " "
" " .....	1,307	3'- 4"x6'- 9"	" " "
" " .....	8,787	3'- 4"x5'- 0"	" " "
" " .....	1,056	3'- 2"x4'- 9"	" " "
" " .....	2,877	3'- 0"x4'- 6"	" " "
" " .....	953	2'- 10"x4'- 3"	" " "
" " .....	364	2'- 9"x4'- 1 1/2"	" " "
" " .....	2,516	2'- 8"x4'- 0"	" " "
" " .....	4,818	2'- 6"x3'- 9"	" " "
" " .....	498	2'- 6"x3'- 6"	" " "
" " .....	150	2'- 5"x3'- 7 1/4"	" " "
" " .....	8,636	2'- 4"x3'- 6"	" " "
" " .....	8,688	2'- 2"x3'- 3"	" " "
" " .....	603	2'- 1"x3'- 1 1/2"	" " "
" " .....	18,874	2'- 0"x3'- 0"	" " "
" " .....	4,921	1'- 10"x2'- 9"	" " "
" " .....	2,432	1'- 8"x2'- 6"	" " "
" " .....	917	1'- 6"x2'- 3"	" " "
" " .....	669	1'- 4"x2'- 0"	" " "
Circular .....	3,017	7'- 0"	" " "
" " .....	3,019	6'- 6"	" " "
" " .....	1,330	6'- 0"	" " "
" " .....	1,743	5'- 9"	" " "
" " .....	3,842	5'- 6"	" " "
" " .....	949	5'- 3"	" " "
" " .....	2,257	5'- 0"	" " "
" " .....	3,274	4'- 7 1/2"	" " "
" " .....	1,762	4'- 6"	" " "
" " .....	3,362	4'- 3"	" " "

## RECAPITULATION BY SIZES.—CONCLUN

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	882	4'-1'	Brick and con
" .....	2,889	4'-0"	" "
" .....	865	3'-8"	" "
" .....	672	3'-6"	" "
" .....	2,309	3'-8"	" "
" .....	2,549	3'-0"	" "
" .....	2,072	2'-8"	" "
" .....	1,830	3'-0"	" "
" .....	180	1'-6"	" "
Elliptical .....	416	2'-10"x4'-3"	Brick-concrete
" .....	265	3'-0"x4'-6"	" "
Segmental .....	80	5'-0"x2'-1"	Concrete.
Elliptical .....	265	4'-10"x7'-3"	"
" .....	1,085	4'-2"x8'-3"	"
" .....	738	3'-2"x4'-9"	"
" .....	612	2'-10"x4'-5"	"
" .....	1,657	2'-10"x4'-3"	"
" .....	1,304	2'-4"x3'-8"	"
Egg shaped .....	882	2'-8"x4'-0"	"
" .....	1,865	2'-6"x3'-9"	"
" .....	191	2'-4"x3'-6"	"
" .....	8,081	2'-2"x3'-3"	"
" .....	1,702	2'-0"x3'-0"	"
" .....	849	1'-8"x2'-6"	"
Circular .....	1,004	4'-9"	"
" .....	694	4'-0"	"
" .....	1,940	2'-8"	"
" .....	1,464	2'-3"	"
" .....	1,189	2'-2"	"
" .....	1,440	2'-0"	"
" .....	20,892	24"	Clay pipe.
" .....	23,840	30"	" "
" .....	37,201	18"	" "
" .....	56,722	15"	" "
" .....	117,782	12"	" "
" .....	90,233	10"	" "
" .....	14,661	8"	" "
" .....	267	6"	" "
" .....	30,487	18"	Cement pipe.
" .....	34,612	15"	" "
" .....	50,741	12"	" "
" .....	4,285	10"	" "
" .....	822	8"	" "
" .....	130	24"	Cast-iron pipe.
" .....	26	18"	" "
" .....	736	24"	Wood pipe.
" .....	290	18"	" "
Miscellaneous shapes .....	919		Brick and con
Total .....	658,826		

GENERAL CLASSIFICATION, 1911.

	Feet	Miles
Brick and cement mortar . . . . .	137,406	26.024
Brick-concrete . . . . .	661	.125
Concrete . . . . .	20,682	3.917
Clay pipe . . . . .	378,568	71.698
Cement pipe . . . . .	120,347	22.793
Cast-iron pipe . . . . .	148	.028
Wood pipe . . . . .	1,016	.193
Total . . . . .	658,828	124.778

SUMMARY OF SEWERAGE STATISTICS.

(In form recommended by Sanitary Section of Boston Society  
Civil Engineers.)

*For the Year Ending December 1, 1911.*

SPRINGFIELD, MASSACHUSETTS.

GENERAL.

Population by census of 1910, . . . . .	88,926
Total area of city or town, . . . . .	38 square miles.
Area served by sewerage system, . . . . .	8 square miles.
Collection system, {	
For sewage only, . . . . .	1.28 miles.
For sewage and surface water, . . . . .	122.97 miles.
For surface water only, . . . . .	0.52 miles.
Method of disposal,—Gravity flow to Connecticut River.	

*Report on Sewers.***COLLECTION.****MAINS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS)**

		For sewage only.	For sewage and surface water.
2.	Lineal feet brick, . . . . .		187,408
3.	" " concrete, . . . . .		21,343
4.	" " pipe, . . . . .	6,754	490,567
5.	" " pipe extended during year,		12,146
6.	Number of inverted siphons, . . . .		1
8.	Method of flushing: By connections with the water system.		
9.	Method of cleaning: By scrapers and flushing.		
11.	Number of direct connections with water mains for flushing, . . . . .	5	493
12.	Number of flushings of entire system during year, . . . . .		26
13.	Cost of flushing, per mile, . . . . .		\$18 50
14.	Cost of cleaning, per mile, . . . . .		\$20 60
17.	Number of storm overflows, . . . .		16
18.	Method of ventilation: By manholes and well holes and through house stacks, . . . . .		

**HOUSE CONNECTIONS.**

1.	By whom made:	By Sewer Department as far as
2.	Sizes, . . . . .	
3.	Number made during year, . . . . .	
4.	Lineal feet laid during year, . . . . .	Ab
7.	Average cost per foot, connections made during year,	

## FINANCIAL.

## CONSTRUCTION.

RECEIPTS.	EXPENDITURES.
Balance of previous year, \$ . . . .	Collection works :—
Bonds issued, . . . . .	(a) Mains, . . . . . \$33,372 93
Appropriations, . . . . 35,000 00	(b) House connections, . 5,424 93
Entrance fees, . . . . . 13,173 27	
House connections, . . . 6,396 09	
By bills rendered, . . . . 408 03	

## MAINTENANCE AND OPERATION.

Balance of previous year, \$ . . . .	Administration, . . . . \$3,337 72
	Tools and supplies and materials, . . . . . 1,320 52
Appropriation, . . . . .	Repairs, . . . . . 1,077 11
	Automobile, Teams, City Yard and engineering, 3,022 85
Assessments, . . . . .	Cleaning sewers, . . . . 2,570 77
Rentals, . . . . .	Cleaning catch basins, . *1,150 80
Other sources, . . . . .	Flushing sewers, . . . . 2,320 73
	Work chargeable, . . . . 519 77
	Unclassified expenses, . 569 90
	Balance, . . . . . 1,440 16
Total, . . . . . \$54,977 39	\$54,977 39
	Amount paid in interest, 1911, . . . . . \$8,400 00

\*Paid from Street Department funds.

GENI

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Total cost of collecting mains to date,

Bonded debt at date, . . . . .

Value of sinking fund at date, . . . .

Average rate of interest on bonds, . .

Proportion of cost of system paid for

Methods of assessing shutters and r

Entrance fee of \$25 per tenement

For business blocks one story :

foot of area covered by building, a

stories in height one and three-fourth

covered by the building.











# Annual Report Superintendent of Streets and Sewers

Compliments of

ARTHUR H. WOODWARD,

Acting Superintendent of Streets and Sewers.



For the Year 1912

**Annual Report**  
**Superintendent of Streets**  
**and Sewers**

**Springfield, Massachusetts**



**For the Year 1912**



FORTY-FOURTH ANNUAL REPORT  
OF THE  
STREET DEPARTMENT.

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SPRINGFIELD, MASS., December 28, 1912.

*To the City Council:—*

In accordance with the requirements of Chapter 19, Section 5, of the Revised Ordinances, I have the honor of presenting statements of receipts and expenditures of the Street Department and descriptions of work done during the fiscal year ending December 1, 1912.

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FINANCES IN GENERAL.

REGULAR ACCOUNTS.

RECEIPTS.

Highways and Bridges appropriation, . . . . .	\$302,000 00	
Walks and Curbing appropriation, . . . . .	28,500 00	
Watering Streets appropriation, . . . . .	42,000 00	
Ashes Collection appropriation, . . . . .	51,500 00	
Garbage Collection appropriation, . . . . .	19,975 00	
		<hr/> \$443,975 00

EXPENDITURES.

Highways and Bridges, . . . . .	\$306,121 66	
Walks and Curbing, . . . . .	28,939 23	
Watering Streets, . . . . .	41,592 82	
Ashes Collection, . . . . .	44,821 40	
Garbage Collection, . . . . .	20,180 67	
		<hr/> \$441,655 78



## BY TRANSFERS.

Highways and Bridges.	\$11,332 69	
Walks and Curbing.	519 98	
Watering Streets.	174 40	
Ashes Collection.	753 64	
Garbage Collection.	205 67	
	<hr/>	\$12,986 38
		<hr/>
		\$428 669 40

## UNEXPENDED BALANCES.

Highways and Bridges.	\$7,211 03	
Walks and Curbing.	80 75	
Watering Streets.	581 58	
Ashes Collection.	7,432 24	
Garbage Collection.		
	<hr/>	15,305 60
		<hr/>
		\$44

## SPECIAL ACCOUNTS.

## LOCUST STREET LAYOUT.

Amount of expenditures.	\$31,634 00	
Expenditures.	30,510 45	
	<hr/>	
Unexpended balance.		\$

## PAGE BOULEVARD.

Amount of expenditures.	\$21,304 00	
Expenditures.	7,985 45	
	<hr/>	
Unexpended balance.		\$1:

## BIRNIE AVENUE EXTENSION.

Amount of expenditures.	\$28,000 00	
Expenditures.	26,049 37	
	<hr/>	
Unexpended balance.		\$1

## WORK IN GENERAL.

Streets, . . . . .	{ Grading and graveling, . . . . .	1,760 feet
	{ Macadamizing, . . . . .	26,338 feet
	{ Macadam resurfacing, . . . . .	5,171 feet
	{ Asphalt resurfacing, . . . . .	194 sq. yards
	{ Bitulithic paving, . . . . .	201 feet
	{ Bitulithic paving, skim coating, . . . . .	1,766 sq. yards
	{ Wood block paving, . . . . .	3,909 feet
Street cleaning, . . . . .	{ Gravel, . . . . .	7.42 miles
	{ Macadam, . . . . .	78.34 miles
	{ Paving, . . . . .	13.00 miles
Sidewalks, . . . . .	{ Brick, new, . . . . .	914 feet
	{ Brick, relaid, . . . . .	974 feet
	{ Cement concrete, new, . . . . .	6,146 feet
Curbing, . . . . .	{ Set, . . . . .	14,742 feet
	{ Reset, . . . . .	12,146 feet
Crosswalks, new, . . . . .		47
Streets watered and oiled, . . . . .		96.87 miles
Ashes and rubbish collected, . . . . .		28,864 loads
Garbage collected, . . . . .		1,736 cords

## FINANCES ITEMIZED.

## HIGHWAYS AND BRIDGES.

## RECEIPTS.

Appropriations.

## EXPENDITURES.

Automobiles, repairs and supplies.	\$5,143 47
Bridges, repairs and care.	16,402 57
City teams, uncredited.	360 34
City yard, Logan street.	7 25
City yard, Summer street.	3,109 02
Engineering.	78 29
Foremen's winter and holiday pay.	1,654 90
Office and general expenses.	4,174 50
Rebates.	5 00
Salary of Assistant Superintendent, part.	2,373 53

Street maintenance.	{ General repairs.	42,376 08
	{ Macadam resurfacing.	7,394 22
	{ Paving resurfacing.	2,207 69
Tolls and supplies.		6,764 32
Work and material charged to private parties.		11,986 10
Work and material charged to departments.		12,517 60
		<hr/> \$117,084 88

By material used from 1912 inventory:—

Lumber for bridges.	\$9,963 59
Material used on streets.	1,569 02
By transfers.	11,332 69
	<hr/> 22,865 30

	<hr/> \$94,219 58
Winter expense.	20,537 40
	<hr/> \$114,756 98

# *Report on Streets.*

7

Street cleaning, .	{ Cleaning streets, .	\$44,614 56	
	{ Cleaning equipment, .	1,122 98	
		<hr/>	
		\$45,737 54	
By city teams, . . . . .		20 13	
		<hr/>	\$45,717 41
			<hr/>
			\$160,474 39

Street construction, .	{ Grading and graveling, .	\$2,789 11	
	{ Macadamizing, . . . . .	96,688 05	
	{ Paving, . . . . .	42,155 02	
	{ Engineering, . . . . .	833 54	
		<hr/>	
		\$142,465 72	
By material charged, paid			
1913, . . . . .		8,151 14	
		<hr/>	134,314 58
			<hr/>
			\$294,788 97
Balance unexpended, . . . . .			7,211 03
		<hr/>	<hr/>
			\$302,000 00

## BILLS RECEIVABLE.

Sales:

Bills receivable November 30, 1911, . . . . .	\$58 48	
Bills committed fiscal year 1912, . . . . .	1,508 20	
	<hr/>	\$1,566 68
Bills paid fiscal year 1912, . . . . .	\$1,512 43	
Payments, . . . . .	4 25	
	<hr/>	1,516 68
		<hr/>

Bills receivable November 30, 1912, . .

\$50 00

*Report on Streets.***Services rendered:**

<b>Bills receivable November 30,</b>		
1911, .....	\$10,702 41	
<b>Bills committed fiscal year 1912,</b>	<b>20,082 00</b>	
		<hr/>
		<b>\$30,784 4</b>
<b>Bills paid fiscal year 1912,....</b>	<b>\$28,569 01</b>	
<b>Abatements,.....</b>	<b>423 25</b>	
		<hr/>
		<b>28,992 2</b>

Bills receivable No-  
vember 30, 1912,.

**Street Licenses granted:**

<b>Bills receivable November 30,</b>		
1911, .....	\$59 00	
<b>Bills committed fiscal year 1912,</b>	<b>5,241 33</b>	
		<hr/>
		<b>\$5,300 3</b>
<b>Bills paid fiscal year 1912,....</b>	<b>\$5,277 33</b>	
<b>Abatements,.....</b>	<b>13 00</b>	
		<hr/>
		<b>5,290 3</b>

Bills receivable No-  
vember 30, 1912,.

Total. . . . .

**WALKS AND CURBING.****RECEIPTS.**

Appropriations, .....

**EXPENDITURES.****Maintenance:**

Crosswalks, relaid, .....	\$2,956 45
Curbing, reset, .....	3,805 62
Engineering, .....	270 03
Foremen's winter and holiday pay, .....	56 18
Office and general expenses,...	230 40
Salary Assistant Superinten- dent, part, . . . . .	119 87
Tools and supplies, .....	347 97

*Report on Streets.*

9

Sidewalk repairs charged city,	\$1,308 16	
Work and material for depart-		
ments, .....	170 73	
Sales, .....	88 04	
Work and material for abut-		
ters, .....	1,555 94	
	<hr/>	
	\$10,909 39	
By transfers, .....	519 98	
	<hr/>	\$10,389 41

Construction:

Crosswalks, new, .....	\$1,790 08	
Curbing set, .....	3,632 26	
Engineering, .....	238 93	
Sidewalks charged city, .....	1,118 06	
Work and material charged		
abutters, .....	13,271 78	
	<hr/>	
	\$20,051 11	
By material and city		
teams, 1913, .....	2,021 27	
	<hr/>	18,029 84
		<hr/>
		\$28,419 25
Unexpended balance,		80 75
		<hr/>
		\$28,500 00

BILLS RECEIVABLE.

Sales:

Bills receivable November 30,		
1911, .....	\$16 66	
Bills committed fiscal year 1912,	74 26	
	<hr/>	\$90 92
Bills paid fiscal year 1912, ....		47 42
		<hr/>
Bills receivable No-		
vember 30, 1912, . .		\$43 50

## Services rendered:

Bills receivable November 30,	
1911,.....	\$4,69
Bills committed fiscal year 1912,	10,99
Bills paid fiscal year 1912,....	\$12,50
Abatements,.....	42

Bills receivable No-  
vember 30, 1912,...

## WATERING S

## RECEIPTS

Appropriation,.....

## EXPENDITURE

General expense,.....  
Standpipes and car hydrants—construction  
    maintenance, opening and closing  
Carts—storage, painting, and repairs,..  
Labor and teams as per pay roll,.....  
Watering streets, teams as per contract,  
American Car Sprinkler Company, as  
    contract,.....  
Oiling streets—labor, teams, and oil,..  
Inspector,.....  
Inspector's horse and carriage,.....  
Tools and material,.....  
Oil equipment,.....  
Private parties—use of teams, sale of oil

City teams credited,.....

By transfers from other departments

Unexpended balance,.....

ASHES COLLECTION.

RECEIPTS.

Appropriation, .....	\$51,500 00
----------------------	-------------

EXPENDITURES.

Pay rolls, .....	\$37,874 42
Contracts, .....	750 00
Provender, .....	2,571 21
Shoeing, veterinary, and miscellaneous, ....	443 04
Vehicles and harness, supplies and repairs, ..	843 74
Tools and supplies, .....	44 69
Telephone and lighting, .....	48 82
Barn repairs and supplies, .....	148 12
Covers, .....	44 00
Automobile, .....	235 00
Ashes collection and repairs to tools by Highways and Bridges department, ..	1,818 36
	<hr/>
	\$44,821 40
By transfers from Highways and Bridges department, .....	753 64
	<hr/>
	\$44,067 76
Unexpended balance, .....	7,432 24
	<hr/>
	\$51,500 00

GARBAGE COLLECTION.

RECEIPTS.

Appropriation, .....	\$22,975 00
----------------------	-------------

EXPENDITURES.

Pay roll, .....	\$15,421 12
Provender, .....	2,954 89
Shoeing, veterinary, and miscellaneous, ....	409 58
Barn repairs and supplies, .....	149 17
Vehicles and harness, supplies and repairs, ..	312 76
Tools and supplies, .....	36 98
Covers and blankets, .....	13 00



Automobile,.....  
 Telephone and lighting,.....  
 Investigating Committee—disposal of  
     bage,.....  
 General expense,.....

By transfer from Ashes Collection,

Transferred to Walks and Cur  
     department,.....

#### BIRNIE AVENUE

Limit of expenditure,.....

#### EXPENDITURE

Grading and building retaining wall,....  
     Unexpended balance,.....

#### LOCUST STREET

Limit of expenditure previously reported

#### EXPENDITURE

Previously reported,.....  
 F. T. Ley & Co., contract,.....  
 Land taken,.....  
 Miscellaneous,.....

Unexpended balance,.....

**PAGE BOULEVARD.**

Limit of expenditure, . . . . .	\$21,304 00
---------------------------------	-------------

**EXPENDITURES.**

Land taken, . . . . .	\$3,530 00	
Macadamizing, . . . . .	4,455 45	
	— —	
	\$7,985 45	
Unexpended balance, . . . . .	13,318 55	
	-	\$21,304 00

## WORK ITEM

## BRIDGE

## REPAIRS AND

D

*Abbe avenue overhead crossing,	Painting
Armory street over B. & A. Railroad,	Floor n
Armory street over N. Y., N. H., & H. Railroad,	Floor n
Berkshire street, I. O., Red House crossing,	Floor n
Ludlow—Indian Orchard,	Floor n
Main street, I. O.,	Floor n
North end, over Conn. River,	Replan
Old Toll,	Floor n
Plainfield street,	Floor n
South end, over Conn. River,	Strengt and
South end, over N. Y., N. H., & H. Railroad,	Laying
St. James avenue,	Floor n
Sundry,	Floor n

\*Contract for labor painting paid in 1913.

**STREET CONSTRUCTION.**

**\*GRADING AND GRAVELING.**

Street.	Length in feet.	Area in sq. yds.	Total Cost.
Kensington avenue, completion,			\$516 34
Knox street,	1,125	3,750	1,485 13
Lester street,	635	2,118	200 41
Maplewood terrace,			90 50
Riverview terrace,			440 02
Wilmont street, completion,			56 71
	1,760	5,868	\$2,789 11

\*Old gravel taken from new macadam streets was used in this work.

## STREET CONSTRUCTION.

## MACADAM.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
*Amaron street—Tarine, Belmont avenue—Texas pen- etration, Charles street—Endurite, Chestnut street—Endurite,	White street to the X, Worthington to Bridge, Pearl street to Harrison avenue,	408 3,634 626 281 } 441 }	1,475 19,434 1,940 2,630	\$0 56 97 1 29 1 50	\$826 25 18,791 99 2,502 24 3,944 27
Clarendon street—Trinidad, Cornell street—Trinidad, *Cumberland street—Tarine, Dartmouth terrace—Trinidad,	Main to North,	140 1,283 372 488	1,204 4,275 1,240 2,544	87 58 34 53	1,048 89 2,474 30 423 58 1,358 10

## STREET CONSTRUCTION.

## MACADAM—CONTINUED.

Street.	Limits.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
*Massasoit street—Tarine,	Prospect street to end of public street,	1,148	3,827	\$0 82	\$2,373 61
*Montrose street—Tarine,		973	3,242	63	2,042 47
Oak street—Endurite,		1,356	4,462	1 28	5,729 39
Orchard street,		1,040	3,467	57	1,962 63
Pearl street—Endurite,		983	2,817	1 28	3,605 00
Pineywoods avenue, comple- tion of 1911,					86 50
Princeton street—Trinidad,	St. James avenue to Cornell street,	267	890	51	450 12
Ridgewood place,		537	1,193	51	609 64
Sumner avenue — Bermudez	Sumner terrace to the X, north side,	1,700	4,236		
penetration,	White street to the X,	2,090	13,460	1 17	20,809 65
*Walter street—Tarine,		390	1,300	69	891 88
Washburn street,		1,400	4,667	54	2,517 72
Wellesley street—Trinidad,		444	1,480	53	781 31
		26,338	100,271		\$96,688 05

\*includes some old rock used from other streets.

## STREET CONST

## RECAPITULATI

	Length in feet.
Macadam, water-bound,	5,714
Macadam, completion of 1911 work,	
Macadam, with Texas pen- etration,	4,295
Endurite,	3,687
Macadam, with Trinidad sur- face,	2,622
Macadam, with Tarine pen- etration,	5,786
Macadam, with Tarite pen- etration,	444
Macadam, with Bermudez penetration,	3,790
	<hr/> 26,338

## STREET CONSTRUCTION.

## PAVING.

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Belmont avenue,	At Fort Pleasant,	Mack blocks,		133	\$3 00	\$400 00
Chestnut street,	Bridge to Pearl,	Bitulithic,	201	952	2 50	2,380 68
East Court street,	Market to Dwight,	Wood blocks,	372	941	3 05	2,868 19
North Main street,	Grove to Thomas,	Wood blocks,	691	2,536	3 27	8,289 93
Sanford street,	Market to Dwight,	Wood blocks,	371	1,324	3 11	4,115 06
*South end bridge approach,						
State street,	Highland Div. N. Y., N. H. & H. Railroad to Amaron street,	Wood blocks,	180	434		
		Wood blocks,	1,106	4,271	3 14	13,404 78
Willow street,		Wood blocks,	1,189	3,443	3 11	10,696 38
			4,110	14,034		\$12,155 02

\*Cost given in table of bridges.



**STREET MAINTENANCE.**  
**MACADAM RESURFACING.**

Street.	Limits.	Material.	Length in feet.	Area in sq. yds.	Cost per sq. yd.	Total Cost.
Buckingham place, Buckingham street, State to Clarendon,		Trinidad asphalt, Trinidad asphalt and Texas oil	275	916	\$0 054	\$49 12
			9 006	6 648	038	253 86

**STREET MAINTENANCE.**

**PAVING RESURFACING.**

**BITULITHIC SKIM-COATING.**

Street.	Area in sq. yds.	Cost.
Bridge street,	387.90	\$484 87
Maple street,	105.40	131 75
State street,	401.40	501 75
Taylor street,	418.80	522 88
Walnut street,	453.15	566 44
	<u>1,766.15</u>	<u>\$2,207 69</u>

**ASPHALT REPAIRS.**

Street.		Area in sq. yds.	Cost.
Bridge street,	Rock asphalt,	99.96	\$249 90
Court street,	Rock asphalt,	27.77	69 42
Elm street,	Rock asphalt,	21.03	52 58
Harrison avenue,	Trinidad asphalt,	45.70	114 25
		<u>194.46</u>	<u>\$486 15</u>

## STREET MAINTENANCE.

## GENERAL REPAIRS.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	M la
Albany st.,		\$69 00			\$1.
Alden st.,		41 17			
Alderman st.,	\$90 00				
Allen st.,	1,587 99	10 38			
Armory st.,	298 35	21 18			
Bay rd.,	462 23				
Bay st.,	116 95	150 88			
Belmont ave.,		339 77		\$5 60	
Benton st.,	81 22				
Berkshire ave.,					
I. O.,	2,321 08				
Berkshire st., I. O.,	15 42	44 18		17 40	
Biltmore st.,				57 08	
Bircham Bend,	31 53				
Birnie ave.,		24 07		91 01	
Boston rd.,	3,078 53				
Bridge st.,			\$79 17		
Buckingham st.,		25 75			
Butler st.,				82 43	
Cambridge st.,	51 27				
Carew st.,	102 42				
Cedar st.,		22 88		21 18	
Central st.,		364 88		62 55	
Charles st.,		22 76		12 18	
Cherry st.,	24 00				
Chestnut st.,		30 50	56 87	65 80	
Chicopee rd.,	41 44				
College st.,	32 41			18 25	
Colton st.,	34 32				
Cypress st.,			322 34		
Dawes st.,	44 32				
Demond ave.,				33 32	
Dexter st.,	13 10			23 42	
Dickinson st.,	1,017 95	24 97		71 45	
Dwight st.,			112 97	8 22	
East Alvord st.,				45 46	
Eastern ave.,		298 39		24 13	
Elm st.,			1 97	21 23	

## STREET MAINTENANCE.

## GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscellaneous.	Total Cost.
st.,				\$25 73		\$25 73
d st., I. O.,	\$29 64				\$5 76	35 40
st.,		\$39 00				39 00
asant ave.,		6 87		13 40	4 21	24 48
st.,	133 50			4 70		138 20
n st.,		46 21		14 89		61 10
st.,		22 42	\$186 53		10 09	219 04
re sq.,	351 06			6 45		357 51
en st., I. O.,	18 70				16 68	35 38
k st.,	49 78	3 44		24 21		77 43
n ave.,		24 93	14 61	6 06		45 60
ave.,	91 51			48 00		139 51
y st.,	29 95				14 02	43 97
ood st.,	83 13					83 13
t.,	19 88			6 87		26 75
st.,	523 55	298 66	13 91	10 64		846 76
st.,		209 29		13 36		222 65
Hill st.,					1,071 00	1,071 00
d st.,				26 12		26 12
st.,			184 96	48 83		233 79
., I. O.,	96 37	363 14		21 92	71 44	552 87
.,		19 31	225 95	53 69	141 59	440 54
st.,	39 52					39 52
t.,		65 03	82 98			148 01
st.,				20 84		20 84
o park,		54 88				54 88
st.,	23 58					23 58
rough st.,				49 97		49 97
st.,	57 25					57 25
d st.,	94 87					94 87
		27 53		39 64		67 17
se st.,	42 11					42 11
st., I. O.,	56 02					56 02
t.,		41 94				41 94
npton ave.,	60 43					60 43
fain st.,		84 50	17 45	39 40	14 26	155 61
, I. O.,	94 26	71 37		5 12	24 21	194 96
l st.,		59 07				59 07

aling filling from Locust street extension.

# STREET MAINTENANCE.

## GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Mileage
Orange st.,	\$239 10				
Orchard st.,				\$37 10	
Ormond st.,	17 10			27 99	
Parker st.,	1,681 93				
Pasco st., I. O.,	131 62				
Patton st.,		\$3 43		23 81	
Pearl st.,		36 91		5 90	
Pecousic ave.,		90 44		4 70	
Pine st.,		93 87		5 54	
Plainfield st.,		66 81		105 60	
Plumtree rd.,	294 66				
Queen st.,	29 45				
St. James ave.,	629 83	73 38			1
Sharon st.,		53 49			
Shattuck st.,	157 26				
Sixteen Acre rd.,	251 46				
Sorrento st.,				64 38	
State st.,		1,508 47	\$296 24	5 22	
Stony Hill rd.,	23 74				
Summer st.,		3 43	22 53	136 26	
Sumner ave.,	360 00	39 74			2
†Sundry sts.,	974 99	8,920 46	31 26	402 69	13
Talcott ave.,				20 36	
Taylor st.,		38 36	58 15	21 78	
Tinkham rd.,	263 66				
Trinity ter.,				105 42	
Union st.,	7 86	246 24		29 49	
Virginia st.,				62 55	
Walnut st.,			265 31	14 05	
Warwick ave.,		280 56			
Water st.,		68 13		5 89	
Wellington st.,	165 75				
West Alvord st.,				41 32	
Westford ave.,	49 78				
White st.,	34 43	130 76		6 80	
Wilbraham rd.,	1,808 12	327 88		2 52	23
Windsor st.,	24 39				
Woodside ter.,		41 38			

†Individual street repairs costing less than \$20.

STREET MAINTENANCE.

GENERAL REPAIRS—Continued.

Street.	Gravel.	Macadam.	Paving.	Receiving Basins.	Miscel- laneous.	Total Cost.
Worcester ave.,	\$193 02					\$193 02
Worcester st.,						
I. O.,	636 15	\$79 45		\$18 04	\$59 94	793 58
Worthington st.,		61.87	\$26 18		4 88	92 93
	\$19,313 94	\$15,093 41	\$1,999 38	\$2,288 06	\$3,195 14	\$41,889 93

## SIDEWALKS AND CURBING.

## CONSTRUCTION AND RECONSTRUCTION.

By orders of the City Council.

Street.	Length in feet.	SIDEWALKS.		CURBING. Length in feet, 4" 6" 7"	Order Approved.
		Material.	Description.		
Armory street, Belmont avenue, Benton street, Carew street, Cumberland street, Eastern avenue,	3,585	Cement concrete,	New,	5,335 2,772 384	Dec. 12, 1911. May 28, 1912. July 12, 1911. July 9, 1912. June 6, 1911. Nov. 29, 1911.

# STREETS MADE PUBLIC.

By order of the City Council.

Name.	Limits.	Length in feet.	Width in feet.
Bristol street.	Wilbraham road to Gunn property,	1,458	50
Broadway,	Worthington to Vernon street,	719	60
Chicopee road,	Carew to Liberty street,	1,111	50
Commonwealth ave.,	Washington to Fairview street,	703	50
Greenacre square,	Foster to Foster street,	488	30
Groveland street,	Dickinson street to Long-meadow line,	657	50
Hollywood street,	Dickinson street to Belmont avenue,	816	50
Jasper street,	Berkshire avenue to Boston road,	947	50
Maple court,	Maple to Pine street,	689	25.3-34
Norman street,	Carew to Roy street,	961	50
Page boulevard,	St. James avenue to Highland terrace,	3,562	70
Roy street,	Chicopee road to Norman street,	290	50
Spencer place,*	Sumner avenue to N. Y., N. H. & H. railroad,	593	50
	2.461 miles.	12,994	

\* Renamed Spencer street December 10, 1912.



**STREETS RELOCATED AND WIDENED****By order of the City Council.**

Name.	Limits.	Length in feet.
Main street, I. O.,	Ludlow avenue, westerly,	376
Water street,	Gardner street to Whitney place,	674

# INVENTORY.

## STREET AND SEWER DEPARTMENTS.

### Lands.

City Yard, Logan street, . . . . .	\$8,500 00
City Yard, Summer street, . . . . .	30,800 00
Gravel bank, Five Mile pond, . . . . .	100 00
Gravel bank, Boston road, . . . . .	75 00
Gravel bank, Island pond, . . . . .	350 00
Trap rock quarry, Westfield, . . . . .	250 00

### Buildings and structures.

Barn, wagon house, and shed, . . . . .	16,048 00
Scales, . . . . .	318 00
Steam roller house, . . . . .	800 00
Trap rock bins and trestle, . . . . .	9,000 00

### Horses, wagons, etc.

Three automobiles, . . . . .	1,600 00
One auto truck, . . . . .	4,370 00
Fourteen horses, . . . . .	2,225 00
Harness, blankets, etc., . . . . .	404 70
Provender, . . . . .	767 25
Sixteen wagons and carts, . . . . .	1,495 00
Sixteen sleighs, sleds, etc., . . . . .	500 00

### Special tools and machines.

Two concrete mixers, . . . . .	1,569 00
Hoisting engine, . . . . .	600 00
Horse rollers, . . . . .	150 00
Macadam scraper, . . . . .	140 00
Eight portable kettles, . . . . .	800 00
Scarifier, . . . . .	410 00
Sewer pumps and portable boiler, . . . . .	235 00
Six steam rollers, . . . . .	7,200 00
Street sweepers and cleaning equipment, . . . . .	1,629 27
Stone dray, . . . . .	250 00

### Street and Sewer materials.

Asphalt binder, . . . . .	550 54
Castings and patterns, . . . . .	562 05
Lumber, . . . . .	1,396 03
Sand and sand tickets, . . . . .	40 00

Trap rock, .....	
Paving brick and wood blocks, .....	
Vitrified clay pipe, .....	

#### Street Watering Equipment.

Nineteen water carts, .....	
Three pressure carts, .....	
Two tanks for road oil, .....	

#### Tools and Supplies,—miscellaneous.

Lanterns and globes, etc., .....	
Machine shop stock and tools, .....	
Sidewalk materials and tools, .....	
Miscellaneous materials and tools, .....	

#### Office furniture and equipment, .....

### ASHES AND GARBAGE COLLE

#### Land and buildings.

State street, land and buildings, .....	
South end barn, .....	
Rubbish burner, Pecousie avenue, .....	

#### Horses, wagons, etc.

Twenty-five horses (twenty-three horses,	
Twenty-one wagons, .....	
Seventeen sleighs, .....	
Harness, blankets, etc., .....	
Provender, .....	

#### Tools and supplies.

Fifty-two barrel carriers, .....	
Thirty-two garbage pails, .....	
Twenty wagon covers, .....	
Small tools, .....	

#### - Automobile, .....

## GENERAL DESCRIPTIONS.

Attention is called to tables in this report, showing costs of the work done by the department during the past fiscal year in maintenance and construction of streets, street cleaning, watering streets or dust laying, sidewalk construction and repairs, and the collection of ashes and garbage. The expenditure of the above mentioned accounts, together with costs of street construction under special accounts, amount to \$465,593.17.

## MACADAM.

Most of our macadam streets have been constructed this year with a bituminous binder. This is proving very satisfactory and I would advise that all new macadam work be laid by either the penetration or mixing method. A machine to mix rock and asphalt should be purchased the coming spring, and also a tandem roller.

Four of our old macadam streets have been resurfaced with endurite this season and I am confident will last a number of years. The endurite process would seem a desirable way of treating a number of our macadam streets where the traffic is too heavy for the present macadam, and where more expensive permanent paving would not be justified.

We have used two kinds of asphalt and one kind of tar the past season.

There are miles of old gravel roads within the city limits which should be macadamized, and I recommend that a beginning be made on some of the following streets:—

Armory street, northerly of Carew.

Liberty street, from Carew street to the city line.

St. James avenue, from bridge over N. Y. N. H. & H. Railroad to the city line.

Berkshire street, one side, from Pine Point to Indian Orchard.

Wilbraham road, from the end of the present macadam to Watershops pond.

Tyler street.

Queen street.

Orange street.

Dickinson street, from Mill street to Forest Park entrance.

The old rock which would be taken from some streets we should pave, would serve to greatly reduce the cost of building above streets.

In noting the improved conditions which exist in places where bituminous macadam has taken the place of the gravel roads, Sumner avenue and Belmont avenue, east of the X to White street, will serve as good illustration.

#### PAVING.

Paving, this season, has consisted of 12,949 square feet of wood blocks and 952 square yards of bitulithic at a cost of \$42,155.02. This is surely a small expenditure for permanent paving, for a city of the size of Springfield there are so many streets in which traffic is too heavy for old water-bound macadam streets. The cost of maintenance on these streets is very large, they are always rough and uneven and altogether very unsatisfactory to ride over. Patching of holes or depressions in such roads is a very unsatisfactory.

The conditions referred to above exist in some of the principal streets, and I would recommend that as far as possible of the following streets be paved the coming season:—

North Main street, from Cumberland street to Washington West State street, completion.

Stockbridge street, from Main to Willow street.

Union street, from Main to Willow street.

Park street, from Main to Willow street.

Hubbard avenue, from Main to Willow street.

Locust street, from Main to Mill street.

Fulton street, from Vine to Seventh street.

State street, from Mapledell street to Colonial avenue.

State street, from Oak to Terrence street, completion.

Walnut street, from Ashley to Hickory street.

Liberty street, from depot entrance to Chestnut street, completion.

Emery street.

Taylor street, from Dwight to Chestnut street.

Elm street, from Court Square to Water street.

Sharon street.

Spring street.

Carew street—Main to Chestnut.

A rough estimate of the money required to pave the above streets is \$180,000. This list by no means contains all the streets in the city which should be paved, but in my judgment they are streets which should be considered first.

#### STREET CLEANING.

The methods used in street cleaning have on the whole been very satisfactory. I am confident our streets could be kept cleaner if more care was exercised by citizens in keeping private alleys and yards free from papers and rubbish.

#### STREET WATERING AND DUST LAYING.

A good asphaltic surface has been maintained on most of the residential streets by use of an asphalt oil. With our new automobile oiling truck the department will be better equipped to apply oil the coming season, and I believe the street watering bills can be somewhat reduced.

The oiling of country roads has not only been very satisfactory to the residents along these roads and to those using them, but has proved very beneficial to the roads and has greatly reduced the cost of maintenance. More of our country roads should be oiled the coming season.

We have at present about one hundred miles of streets under the street watering act.

## ASHES AND GARBAGE

An incinerator has been installed to burn papers and light rubbish. It proves a good investment, as it burns material which has been durable. It has been a source of great annoyance. It has been built at the north end of the city.

The city is under contract with the Garbage Company to deliver all garbage to the street, on or before February 1st. The company will provide a most satisfactory service.

## CITY

I would advise that our year-end property acquired for the city should be sold.

A large combination shed should be built at our Summer street.

A new and up-to-date stable should be built. Also a new barn at the South end. It is a disgrace to the department.

## ACKNOWLEDGMENTS

In bringing to a close this report, I desire to thank the clerical force of this department, and men. Finally I desire to thank Alderman Edward S. Goldthorpe, A. Albee, members of the Board of Bridges, for their co-operation during the year.

Respectfully,

A. J.

BOARD OF ALDERMEN, December 30, 1912.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

COMMON COUNCIL, December 30, 1912.

Read and concurred.

GEO. J. CLARK, *Clerk.*

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Presented to the Mayor, for approval, December 31, 1912.

E. A. NEWELL, *City Clerk.*

MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1912.

Approved.

EDWARD H. LATHROP, *Mayor.*



**MACADAM REPLACED BY PAVING.**

		Length in feet.
Chestnut street,	Bridge street to Pearl,	201
East Court street.	Market street to Dwight,	369
North Main street.	Grove street to Thomas,	691
Sanford street,	Market street to Dwight,	367
State street,	Highland Div. N. Y. N. H. & H. R. R. to Amaron street,	1,106
Willow street.		895
		<b>3,629</b>

TABLE OF MACADAMIZED STREETS.

\*Includes Macadam laid by Spfd. Street Ry. Co.

\*\*Macadam laid by Spfd. Street Ry. Co.

Macadam laid by private parties.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Abbe ave. bridge app.,		872	2,325
Acushnet avenue,		1,088	3,385
Adams street,		1,003	3,326
†Agawam street,	Pecousic avenue to South st.,	230	383
Alden street,		2,776	*9,306
Alexander street,		414	1,380
Alfred street,		490	1,635
Allen street,	Mill street to N. E. R. R.,	4,017	*13,798
Allendale street,		663	2,094
Amaron street,			
Tarine,		408	1,475
Amherst street,	Harvard to Monmouth,	1,233	4,069
Andrew street,	State to Dawes,	1,323	4,228
Arbor street,		437	1,222
Arch street,	Main street westerly,	410	1,366
Armory street,	Federal st. to Warwick ave.,	2,305	7,688
Armory street,	Liberty to Carew,	1,570	5,203
Ashley street,		1,378	4,592
Auburn street,		787	1,942
Autumn street,		197	504
Avon place,		644	2,538
†Avon place,		67	386
Bancroft street,		1,435	4,865
Banks place,		225	536
Bay street,	St. James ave. to Cambridge street,	4,469	*14,853
Beaumont street,	Dickinson st. to Belmont ave.,	689	2,295
Beech street,		528	1,303
Beechwood street,	Sumner ave. to Spruceland st.,	501	1,670
Belmont avenue,	Woodside ave. to Oakland st.,	2,599	7,043
Belmont avenue,	Oakland st. to Sumner ave., easterly side,		**1,905

**TABLE OF MACADAMIZED STREETS.—CONTINUED.**

NAME OF STREETS.	Limits.	Length in feet.
Belmont avenue,	South side, Garfield street to Sumner avenue,	1,624
Belmont avenue, Texas penetration,	Sumner avenue to White st.,	3,634
Berkeley street,		453
Berkshire street,	State to Oak, I. O.,	
Berkshire street,	Oak to Chestnut, I. O.,	1,400
Birnie avenue,	Greenwich st. to Wason ave.,	3,369
Bliss street,	Main street to N. Y., N. H. & H. R. R.,	1,229
Bond street,		1,629
Bowdoin street,	St. James avenue to Inger- soll grove,	1,944
Bowles street,	Bay to McKnight,	750
Boylston street,		864
Bradford street,		862
Broad street,		959
Brookline avenue,		615
Buckingham place,		275
Buckingham street,		2,006
Butler street,		1,525
Byers street,	State to Frost,	480
Carew street,	Main to point near Bartlett,	2,618
Calhoun street,		1,129
Cass street,	Liberty to Butler,	1,762
Catharine street,	Bay to Dartmouth,	150
Cedar street,		1,962
Central street,		4,903
Central street,	Cedar to Mill,	
†Chapin terrace,	Chestnut to Marvin,	601
Charles street,		
Endurite,	Liberty to Franklin,	626
Chase avenue,		583
Cherryvale avenue,		687

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Chestnut street,	State to Harrison ave., and Jefferson avenue to Spring- field street,	3,906	7,514
Chestnut street, Endurite,	Harrison avenue to Pearl st., Bridge st. to Worthington,	281 } 441 }	2,630
Chestnut street,	Allendale to Springfield,		**2,908
Church street,		832	2,553
Churchill street,		575	1,919
Clark street,		619	1,100
Clarendon street,	Bay to 200 feet north of Worthington,	1,452	4,834
Clarendon street, Trinidad,	extension to Dartmouth ter.,	140	1,204
Clinton street,		703	1,842
College street,		527	1,522
Congress street,		1,550	3,918
Cornell street, Trinidad,		1,283	4,275
Cross street,	Willow to Maple,	608	1,416
Crystal avenue,		930	3,100
Cumberland street, Tarine,	Main to North,	372	1,240
Cumberland street,	North to Chestnut,	426	1,420
Dale street,		812	2,051
Dartmouth street,		1,132	5,159
Dartmouth terrace, Trinidad,		488	2,544
Demond avenue,		859	2,863
Dickinson street,	Marengo park to Sumner ave.,	3,074	8,540
Donald street, Tarite,		444	1,480
Dorchester street,		567	1,887
Douglas street,		540	1,800
Eagle street,		556	1,855
East Hooker street,		679	1,786

TABLE OF MACADAMIZED

NAME OF STREETS.	Limit
Eastern avenue, Edwards street, Elliot street, Elm street,	N. Y., N. H. & Court Square.
Elmwood street, Emery street, Essex street, Euclid avenue, Everett street, Fairfield street, Farnsworth street, Federal street, Firglade avenue, Fisk avenue, Florentine gardens, Florence street, Florida street, Forest street, Forest Park avenue, Forest Park avenue,	Width of 20 feet Pearl to Worthi  Walnut to Pine, Bay to Ingersoll  Sumner avenue Fort Pleasant av street, 22½ feet
Fort Pleasant avenue, Fort Pleasant avenue, Franklin street, Franklin street,	west side, east side, Main to Webste Webster to Ger of 20 feet,
Fremont street, Fulton street, Gardner street, Garfield street, Genesee street, George street, Grace street, Grant street, Gray's avenue,	Plainfield to Vir Water to Main,  width of 20 feet Maple easterly,

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Greene street,	North Main to Becket,	1,347	4,490
Greenleaf street,		740	3,098
Greenwich street,		643	2,143
Greenwood street,		1,561	5,025
Grove street,		612	1,734
Grosvenor street,		738	2,286
Hall street,	width of 20 feet,	992	3,307
Hamburg street,		574	1,786
Hancock street,	Clark to State,	3,989	*13,479
Harriet street,	Yale to Cornell,	816	2,720
Harvard street,		1,565	5,206
Hawthorne street,		540	1,374
Hebron street,	Liberty to Warwick ave., Walnut to Sheffield st., and Alden street easterly,	698	2,204
Heywood street,		250	833
Hickory street,		4,710	11,589
High street,	N. Y., N. H. & H. R. R. to Main,	2,563	5,544
Holyoke street,		776	2,001
Homer street,		582	1,940
Howard street,	Worthington st. to Bowdoin,	1,277	4,326
Hubbard avenue,		568	1,063
†Huntington street,		643	2,143
Ingersoll grove,	Walnut to Highland division N. Y., N. H. & H. R. R.,	1,395	4,650
Ingraham avenue,		258	462
James street,		928	2,356
Jefferson avenue,	N. Y., N. H. & H. R. R.,	1,275	6,375
John street,		640	2,136
Keith street,		1,107	3,690
Kenwood park,	N. Y., N. H. & H. R. R.,	721	3,888
Kibbe avenue,		213	710
King street,		2,568	*8,484
Lafayette street,	N. Y., N. H. & H. R. R.,	568	1,865
Lebanon street,		1,926	5,233
Lexington avenue,		622	1,659

TABLE OF MACADAMIZED ST

NAME OF STREETS.	Limits.
Leyfred terrace,	
Liberty street,	Main street east
	Wolcott to Care
Liberty street,	Heywood avenue t
	line,
Lillian street,	
Linden street,	
Litchfield street,	
Locust street,	Main to Mill,
Locust street,	
Tarine,	Belmont ave. to Di
Lombard street,	
Longhill street,	Sumner ave. to Wa
Longhill street,	Sumner ave. to W
	boulevard,
†Longmeadow street,	Longhill street
	meadow line,
Loring street,	
Lowell street,	
Madison avenue,	
Magazine street,	Lincoln to Armory
Magnolia terrace,	Sumner ave. to
	ave.,
Main street,	Mill river to Locu
Main street, I. O.,	Front to Parker,
Main street, I. O.,	Front st. to Ludlo
Maple street,	top of hill to Geor
Mapledell street,	
Maplewood terrace,	south side, Fort Pl
	to Forest Park a
Maplewood terrace,	north side, Forest
	to Riverview ter
Marble street,	
Marengo park,	
Margaret street,	Water to Main,

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Mason street, Texas penetration,		661	2,203
Massasoit street,	Carew to Prospect,	851	2,803
Massasoit street, Tarine,	Prospect street to 143' north of Montmorenci,	1,148	3,827
Massasoit street,	Chapin terrace to Pratt st.,	430	1,440
Mattoon street,		524	1,775
McKnight street,	Sherman to Bowles,	532	1,773
Medford street,	N. Main st. to Birnie ave.,	624	2,080
Merwin street,		713	2,377
Mill street,	Main to Dickinson,	3,250	13,564
Monmouth street,		1,168	4,000
Monroe street,	Hancock to Eastern avenue,	1,345	3,736
Montmorenci street,		620	2,067
Montrose street, Tarine,		973	3,242
Morgan street,		852	2,914
Morris street,		1,022	3,031
Mountainview street,		682	2,330
Mulberry street,	Maple to Union,	2,015	5,706
Murray Hill avenue,		600	2,000
Myrtle street,		484	997
North street,	Liberty to Cumberland,	5,729	19,944
Northampton avenue,	Wilbraham road to Beverly street,	1,229	4,096
North Main street,	Thomas to Chicopee line,	3,203	†17,728
Norwood street,		1,117	2,911
Oak street, Endurite,		1,356	4,462
Oak street, I. O.,	Berkshire to Water,	1,457	5,731
Oak street, I. O.,	Berkshire to Main,		**2,078
Oakland street,	Allen to Sumner avenue,	4,153	14,808
Olive street,		478	1,248
Orchard street,		1,040	3,467
Orleans street,		1,509	4,293

† Includes car tracks, Grove street to Thomas.



TABLE OF MACADAMIZED STREETS.—CONTINUED

NAME OF STREETS.	Limits.	Length in feet
Osgood street,		86
Palmer avenue,		96
Park street,	Main to Willow and foot of hill to Maple,	86
Parkwood street,		42
Patton street,		1,63
Pearl street,		
Endurite,	Chestnut to Spring,	96
Pearl street,	Spring to Byers,	23
Pecousic avenue,	Garduer street to Mill River bridge,	1,92
Pecousic avenue,	Mill River bridge to Main street,	32
Pecousic avenue,	Main street to Longhill,	3,62
Pendleton avenue,		2,58
Pine street,		4,42
Pineywoods avenue,	Washington road to Floren- tine gardens,	1,27
Plainfield street,	B. & M. R. R. bridge to Wa- son avenue,	5,38
Plainfield street,	Washburn to Wason avenue,	
Pleasant street,		42
Plymouth street,		47
Portland street,	N. Main to Birnie avenue,	61
†Pratt street,	Chestnut to Marvin,	60
Princeton street,	Bay to St. James avenue,	1,50
Princeton street,	Bay to St. James avenue,	
Princeton street,		
Trinidad,	St. James ave. to Cornell st.,	26
Prospect street,	Massasoit to Carew,	81
Quincy street,	Oak to Eastern avenue,	2,70
Randolph street,	Sumner ave. to Forest Park avenue,	91
Reed street,		66
Ridgewood place,		52
Ringgold street,		72

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Riverview street,		625	2,084
Riverview terrace,		281	721
Rowland avenue,	Plainfield street to Abbe ave. bridge approach,	690	1,674
Rutland street,		277	926
Rutledge avenue,		516	1,599
Salem street,	Mattoon to Spring,	522	1,426
Sargeant street,		860	3,126
School street,		1,415	4,597
Seventh street,		822	2,529
Sharon street,		1,200	3,895
Sheldon street,	Birnie avenue to N. Main,	651	2,027
Sherman street,	State to Clarendon,	1,623	5,394
South street,	Agawam street to Mill river,	1,863	6,878
Spring street,		2,373	7,322
Springfield street,	Chicopee line southwesterly,	3,700	7,400
Springfield street,	Chestnut street northeasterly,	400	1,355
Springfield street,	Chestnut to dingle, and Ham- burg street to Chicopee line,		**1,242
Spruce street,		699	1,737
Spruceland avenue,		1,370	4,566
State street,	Water st. easterly, City Li- brary to Federal, West- minster st. to Sherman, and Amaron st. to Berkshire avenue,	15,475	53,098
Stearns square,	east of park,	259	461
Stebbins street,	State to Quincy,	973	3,243
St. James avenue,	State to Highland division N. Y., N. H. & H. R. R.,	5,470	15,557
St. James avenue,	State to end of track,		**5,213
St. James circle,	St. James avenue to Jennette avenue,	1,131	1,509

Includes car tracks, Stebbins street to Westminster, N. Y., N. H., & H. R. R. to Amaron street, and both sides from curb to 10' from outside rails from Oak to Stebbins street.

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.
Stockbridge street,		635
Summer street,	Federal to Armory,	378
Sumner avenue,	Longhill street to Forest Park entrance,	3,219
Sumner avenue,	Park entrance to Lenox street, southerly side,	1,700
Sumner avenue, Bermudez pene- tration,	Park entrance to Lenox street, northerly side,	1,700
Sumner avenue,	Lenox st. to east line Dick- inson street,	484
Sumner avenue, Bermudez pene- tration,	90' west of Ventura to White street,	2,090
Sumner avenue,	Longhill to 90' west of Ventura street,	
Taylor street,		413
Temple street,		953
Tenth street,		1,577
Terrence street,		714
Thomas street,		583
Thompson street,		2,093
Tyler street,	Oak to Hancock,	1,346
Union street,	N. Y., N. H. & H. R. R. to ft. of hill, Maple to Eastern ave.,	7,440
Vine street,		745
Vinton street,		612
Walnut street,	Mill to Hancock,	1,457
Walter street,		
Tarine,		390
Waltham avenue,		985
Warner place,		691
Warriner avenue,		450
Warwick street,	Heywood street easterly,	811

TABLE OF MACADAMIZED STREETS.—CONTINUED.

NAME OF STREETS.	Limits.	Length in feet.	Area in sq. yds.
Washburn street,		1,400	4,667
Washington road,	Maplewood terrace to Piney- woods avenue,	1,083	3,610
Wason avenue,	B. & M. R. R. to N. Main st.,	505	1,718
Wason avenue,	B. & M. R. R. to N. Main st.,		**449
Water street,		5,145	16,525
Waverly street,		850	2,910
Webster street,		606	2,020
Wellesley street,			
Trinidad,		444	1,480
West street,		1,195	3,872
Westernview street,		650	2,167
Westford avenue,		1,380	6,133
Westminster street,		1,911	6,388
White street,	Allen to Longmeadow line,	8,288	19,446
White street,	Orange to Sumner avenue, and Belmont avenue to Longmeadow line,		**3,774
Wight place,		388	692
Wilbraham avenue,		2,046	6,820
Wilbraham road,	State to Homer,	2,579	11,427
Wilbraham road,	southerly side, Homer to Benton,	2,600	5,142
Wilbraham road,	Westford avenue to point 660 ft. east of Benton street,		**3,682
Wilcox street,	Main to 385 ft. westerly from Water,	1,307	4,000
William street,	N. Y., N. H. & H. R. R. to Main,	1,368	4,359
Winthrop street,		659	2,397
Woodside terrace,	Belmont ave. to Forest Park ave.,	463	1,543
Woodside terrace,	Belmont avenue easterly,	474	1,580
Worcester street, I. O.,	Pine to Fiberloid Co.'s drive- way, 18 ft. in width,	4,994	10,988
Worthington street,	Spring street easterly,	1,259	4,197

TABLE OF MACADAMIZED STREETS.—CONTINUED

NAME OF STREETS.	Limits.	Length in feet
Worthington street,	Sackett's pl. to Federal st.,	1,12
Worthington street,	Armory st. to St. James ave.,	2,51
Yale street,	Dartmouth to Monmouth,	1,48
York street,		1,00
Total,	77.383 miles.	408,56

**MACADAM RECAPITULATION.**

	Length in feet.	Length in miles.	Area in square yards.
Bermudez penetration,	3,790	.718	17,696
Endurite,	3,687	.698	11,849
Tarine penetration,	5,786	1.096	18,766
Tarite penetration,	444	.084	1,480
Texas penetration,	4,295	.813	21,637
Trinidad surface,	2,622	.497	10,393
Water bound.	387,957	73.477	1,323,670
	408,581	77.383	1,405,491

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year laid.
Barnes street,		Bitulithic,	178	552	1909
Belmont avenue,	At Locust and Mill streets,	Macak blocks,		133	1912
Belmont avenue,	Hall street westerly,	Catakill blocks,	1,302	1,211	1901
Belmont avenue,	Hall street to Oakland,	Metropolitan blocks,	1,023	914	1903
Birnie avenue,	Hooker street northerly,	Johnsonburg blocks,	145	433	1906
Bridge street,	Main to Dwight,	Rock asphalt,	688	2,525	1900
Bridge street,	Dwight to Chestnut,	Creo-resinate wood bl'ks, 3" x 3 1/2" x 8",	122	446	1910
		Asphalt blocks, 5" x 12" x 3",	195	712	1910
Bridge street,		Bitulithic,	493	1,746	1905
Bridge street,	Main street, 493 feet westerly, extension to Water street,	Bitulithic,	252	895	1911
Bridge street,	Water street to Old Toll bridge,	Granite blocks,	249	718	1907
Catharine street,	State to Bay,	Syncrete brick,	1,722	5,691	1900
Charles street,	Liberty to land of B. & A. R. R.,	Granite blocks,	150	376	1903
Chestnut street,	Pearl to Bridge,	Bitulithic,	201	952	1912
Chestnut street,	Worthington to Lyman,	Granite blocks,	472	1,673	1895

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Chestnut street,	Everett to Carew,	Granite blocks,	354	718	1893
Chestnut street,	Carew to Allendale,	Syracuse brick,	1,015	3,432	1900
Chestnut street,	Allendale to Jefferson avenue,	Bitulithic,	825	2,898	1905
Court street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick, Syracuse brick,	317 — —	1,149 174 128	1897 1897 1907
Court street,	Court Square avenue to Water st.,	Bitulithic,	617	2,699	1911
Court Square avenue,	Court to Elm,	{ Rock asphalt, Syracuse brick,	193 —	503 330	1897 1897
Cypress street,	Main street westerly,	Granite blocks,	459	1,700	1904
Cypress street,	Boylston to Fulton,	Granite blocks,	216	848	1905
Dwight street,	State to Lyman,	Syracuse brick,	2,324	9,905	1896
East Court street,	Main to Market,	Rock asphalt,	117	297	1900
East Court street,	Market to Dwight	Creo-resinate wood bl'ks, 3"x3½"x6" to 10",	372	941	1912
Elm street,	Main to Court Square avenue,	{ Rock asphalt, Syracuse brick,	343 —	949 330	1897 1897
Ferry street,	Main street to foot of hill,	Bitulithic,	1,389	3,597	1910
Fort street,	Main to Water,	Granite blocks,	670	1,770	1895
Fulton street,	Cypress to Vine,	Granite blocks,	1,125	3,006	1906



TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Hampden street,	Main street westerly, completion Main to Water, Main to Dwight, Main to Dwight, St. Ry. turnout,	Bitulithic,	212	821	1904
Hampden street,		Bitulithic,	394	1,539	1905
Harrison avenue,		Trinidad asphalt,	586	2,247	1896
Hillman street,		Bitulithic,	648	2,025	1906
King street,		Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	317	1,023	1908
Liberty street,	Main street, easterly, Chestnut to Cass, Cass to Heywood avenue, Main to Chestnut,	Bitulithic,	311	1,335	1911
Liberty street,		Syracuse brick,	1,399	4,571	1900
Liberty street,		Syracuse brick,	1,147	3,971	1901
Lyman street,		Granite blocks,	1,305	4,599	1889

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Main street,	Worthington to Hampden, east side,	Creo-resinate wood bl'ks, 4" x 4" x 8",	—	962	1903
Main street,	Hampden to Lyman,	Creo-resinate wood bl'ks, 4" x 4" x 8",	153	775	1903
Main street,	Lyman to Liberty,	Creo-resinate grooved wood bl'ks, 4" x 4" x 8",	464	2,780	1903
Main street,	Liberty to Sharon, east side,	Cr. o-resinate wood bl'ks, 4" x 4" x 8",	453	1,135	1903
Main street,	Liberty to Sharon, west side,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	—	1,487	1907
Main street,	Sharon to near Franklin and Emery,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	509	3,103	1907
Main street,	near Franklin, east side,	Syracuse brick,	36	141	1907
Main street,	Franklin to Carew, east side,	Syracuse brick,	1,302	4,603	1897
Main street,	Emery to Sargeant, west side,	Catakill blocks,	1,447	5,449	1901
Main street,	crossing opposite Auburn street,	Catakill and Metropoli tan blocks,	—	163	1903
Maple street,	Central to High,	Bitulithic,	1,563	5,065	1904
Maple street,	High to State,	Bitulithic,	593	2,530	1905
Market street,	State to Harrison avenue,	Bitulithic,	968	1,887	1906
North Main street,	Plainfield to Morgan,	Bitulithic,	730	4,485	1906

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
North Main street,	Morgan to Bancroft,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	879	4,544	1909
North Main street,	Bancroft to Calhoun,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	839	4,210	1910
North Main street,	Calhoun to Grove,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	673	3,466	1911
North Main street,	Grove to Thomas,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	691	2,536	1912
North Main street, Plainfield street,	at Wason avenue, Sargeant to Fulton,	Syracuse brick, Syracuse brick,	— 1,710	196 10,249	1908 1902

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
State street,	Oak to Stebbins,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	762	3,031	1909
State street,	Pleasant to Terrence,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	386	1,497	1910
State street,	Terrence to Westminster,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	639	3,256	1911
State street,	at Walnut,	3" x 3½" x 6" to 10",	—	278	1908
State street,	at St. James avenue,	Syracuse brick,	—	183	1907
State street,	Sherman to Highland Div., N. Y., N. H. & H. R. R.,	Syracuse brick,	820	4,352	1905
State street,	Highland Div., N. Y., N. H. & H. R. R.,	Bitulithic,	1,106	4,271	1912
Summer street,	R. R., to Amaron street,	Creo-resinate wood bl'ks, 3" x 3½" x 6" to 10",	567	1,512	1907
Summer street,	Spring to near Autumn,	Granite blocks,	1,259	4,029	1895
Summer street,	Autumn to Kibbe avenue, Kibbe avenue to point 85' west of Federal,	Granite blocks, Granite blocks,	787	2,635	1901
Taylor street,	Main to Dwight,	Bitulithic,	770	2,580	1904
Townsley avenue,		Bitulithic,	142	214	1908
Vernon street,		Bitulithic,	821	2,047	1911
Walnut street,	State to Union,	Syracuse brick,	638	2,144	1899
Walnut street,	Union to Pendleton avenue,	Syracuse brick,	873	3,140	1900

TABLE OF PAVED STREETS.

Name.	Limits.	Material.	Length in feet.	Area in sq. yds.	Year Laid.
Walnut street,	Pendleton ave. to Lebanon st.,	Bitulithic,	1,195	3,888	1905
Walnut street,	Lebanon to Hancock,	Bitulithic,	1,005	3,334	1906
Walnut street,	at Ashley,	Bitulithic,	—	44	1911
White street,	Allen to Orange,	Syracuse brick,	1,610	2,400	1902
Willow street,		Creo-resinate wood bl'ks. 3" x 8½" x 6" to 10",	1,189	3,443	1912
Worthington street,	Main to Dwight,	Syracuse brick,	739	2,544	1896
Worthington street,	Dwight to Fairbanks place,	Syracuse brick,	1,060	3,869	1901
Worthington street,	Fairbanks place to east line of Spring,	Syracuse brick,	269	1,003	1903
Worthington street,	Main to Broadway,	Bitulithic,	404	1,418	1905
Worthington street,	Broadway to Water street,	Creo-resinate wood bl'ks. 3" x 8½" x 6" to 10",	299	1,061	1909
Worthington street,	at Sackett place,	Creo-resinate wood bl'ks. 3" x 8½" x 6" to 10",	265	886	1908
Worthington street,	Federal to Armory.	Creo-resinate wood bl'ks. 3" x 8½" x 6" to 10",	874	1,312	1908

## RECAPITULATION.

Material.	Length in feet.	Length in miles.	Area in sq. yds.	Material.	Length in feet.	Length in miles.	Area in sq. yds.
Bitulithic,	15,401	2.917	54,369	Mack blocks,			133
Catskill blocks,	2,809	.532	6,741	Metropolitan blocks,	1,023	.194	996
Creo-resinate wood blocks,	15,809	2.994	72,128	Rock asphalt,	1,760	.333	5,680
Granite blocks,	11,297	2.140	36,716	Syracuse brick,	19,534	3.7	77,920
Johnsonburg blocks,	145	.027	483	Trinidad asphalt,	686	.111	2,247
				Asphalt blocks,	195	.037	712
				Total,	68,559	12.985	258,075

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FORTY-FOURTH ANNUAL REPORT  
OF THE  
SEWER DEPARTMENT.

SPRINGFIELD, MASS., December 28, 1912.

*To the Mayor and Board of Aldermen:—*

I have the honor of presenting statements of receipts and expenditures of the Sewer Department, and descriptions of work done during the fiscal year ending December 1, 1912.

RECEIPTS.

SEWERS AND DRAINS.

Appropriation, .....	\$60,700.00	
Transfers, from other departments, .....	1,027.22	
	<hr/>	\$61,727.22

EXPENDITURES.

Building private drains, .....	\$5,014.93
City teams and automobile, uncredited balance, .....	1,258.60
City yard, .....	1,355.64
Engineering, .....	489.41
Foremen's winter and holiday pay, .....	173.25
Office and general expenses, .....	1,249.16
Refunds on account of fees for sewer en- trances, .....	185.16
	<hr/>
Amount carried forward, .....	\$9,726.15



Amount brought forward,.....	\$9,726.15
Refunds—unexpended balances on deposits for building private drains,.....	423.27
Salary of assistant superintendent,.....	2,000.00
Sewers { Cleaning,.....	2,231.61
Construction,.....	39,908.11
Flushing,.....	2,149.99
Repairs,.....	1,072.59
Supplies,.....	172.32
Tools,.....	749.23
Work and material charged to departments and private parties,.....	1,646.38
	<hr/>
	\$60,079.65
Credit by material used 1912 and paid for 1913,.....	595.52
	<hr/>
	\$59,484.13
Unexpended balance,.....	2,243.09
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\$

## BILLS RECEIVABLE.

Bills receivable, November 30, 1911,.....	\$399.52
Bills committed, fiscal year 1912.....	37,154.49
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Bills paid, fiscal year 1912,.....	\$30,142.55
Abatements,.....	1,495.36
	<hr/>

\$

Bills receivable, November 30, 1912,...

SEWER CONSTRUCTION CLASSIFIED.

VITRIFIED CLAY PIPE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
10"	7,723'		7,723'
12"	4,408'	383'	4,791'
15"	2,815'	411'	3,226'
18"	3,216'	300'	3,516'
20"	862'	641'	1,503'
24"	4,016'	1,204'	5,220'
Total	23,040'	2,939'	25,979'

CONCRETE.

SIZES.	LENGTH IN FEET.		Total Length.
	New Construction.	Reconstruction.	
2'-8"x4'-0" elliptical.....	374'	.....	374'

## SEWER CONSTRUCTION AND RECONSTRUCTION

## DESCRIPTIONS AND COSTS—FISCAL YEAR 1912

LOCATION.	Material.	Length in Feet.	Size.
Albemarle avenue, Wilbraham road southerly.....	Clay	300 314 421	15" } 13" } 10" }
Amaron street, flush gate.....		....	....
Armory street, manholes.....		....	....
Atwater terrace, Springfield street northerly.....	Clay	1020	18"
Beech street, manhole.....		....	....
Belvidere avenue, Belmont avenue southerly.....	Clay	300 201	20" } 18" }
Biltmore street, Dickinson street to Trafton road.....	Clay	350 349 351	15" } 12" } 10" }
Birnie avenue extension, Arch street southerly.....	Clay	445	10"
Blaine street, White to Greenbrier street.....	Clay	118	24"
Cedar street, manhole.....		....	....
Centre street, I. O., manhole.....		....	....
Chilson street, Sumner avenue south- erly.....	Clay	226	10"
Concord terrace, flush gate....		....	....
Crane street, Franklin street north- erly.....	Clay	299	10"
Daviston avenue, Allen street south- erly.....	Clay	1102	10"
Dawson avenue, manhole....		....	....
Dexter street, manhole.....		....	....

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Dunmoreland avenue, Wilbraham road southerly . . . . .	Clay	301 200	15" } 12" }	\$604 37
East Alvord street, West Alvord to Daviston avenue. . . . .	Clay	495 598	18" } 12" }	956 64
Eddywood avenue, Sumner avenue northerly. . . . .	Clay	328	10"	436 66
Franklin street, Webster street to Murray Hill avenue, extension	Clay	260	10"	342 29
Goodrich street, Liberty street north- erly. . . . .	Clay	240	10"	460 87
Greenbrier street, Larkspur to Blaine street. . . . .	Clay	570	10"	391 24
Hancock street, manholes. . . . .		....	....	143 88
Hancock street, flush gate. . . . .		....	....	20 80
Ingersoll grove, Florida street east- erly, completion. . . . .		....	....	19 83
Knox street, Smith to Windsor street, relaying. . . . .	Clay	866	24"	1,988 46
Larkspur street, White street east- erly . . . . .	Clay	299 304 101	15" } 12" } 10" }	484 95
Logan street, flush gate. . . . .		....	....	21 56
Lowell street, at Connecticut River. .	Clay	70	12"	77 03
Main street, Locust to Mill street, completion . . . . .		....	....	116 49
Mapledell street, extension northerly to Burr street . . . . .	Clay	42	10"	62 54
Marlboro avenue, State street to Wilbraham road. . . . .	Clay	300 449	12" } 10" }	537 09

## SEWER CONSTRUCTION AND RECONSTRUCTION.—

LOCATION.	Material.	Length in Feet.	Size.
Moore avenue, Plainfield street west- erly, .....	Clay	299 435	12" 10" }
Mulberry street, Maple to School street, completion.....		....	....
North Main street, southerly from Osgood street, completion....		....	....
Oak street, Walnut to Tyler street, completion .....		....	....
Oak Grove avenue, extension north- erly and southerly.....	Clay	404	10"
Orange street, manholes.....		....	....
Osgood street, Garden Brook sewer to North street, relaying.....	Clay	340 340	24" 20" }
Page boulevard, St. James avenue northerly, incomplete.....	Clay	3,232	24"
Plainfield street, flush gate.....		....	....
Plainfield street, Sanderson terrace southerly, extension, comple- tion .....	Clay	151 208	24" 15" }
Prospect street, Massasoit street easterly, completion.....		....	....
Ranney street, Johnson street north- erly.....	Clay	301 264	12" 10" }
Ranney street, Wilmont street south- erly.....	Clay	85	10"
Sharon street, Garden Brook sewer easterly, relaying.....	Clay	301 300 231 232	20" 18" 15" 12" }
Sharon street, Garden Brook sewer westerly, relaying.....	Clay	180 151	15" 12" }

## SEWER CONSTRUCTION AND RECONSTRUCTION.—CONTINUED.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
State street, flush gate.....		....	....	\$28 94
St. James avenue, Chicopee road to Page boulevard. ....	Clay	127	24"	396 52
Sullivan street, manhole.....		....	....	40 41
Sylvan avenue, Belmont avenue southerly.....	Clay	294 251 249	20" 18" 15" }	1,136 42
Taylor street, Main to Dwight street, completion .....		....	....	80 29
Trafton road, Dickinson street west- erly .....	Clay	351 460 140	18" 15" 12" }	923 68
Trillium street, White street to Green- brier.....	Clay	345	10"	216 74
Trinity terrace, Sumner avenue south- erly.....	Clay	300 416	12" 10" }	533 91
Virginia street, Dickinson street to Trafton road.....	Clay	348 301 344	15" 12" 10" }	731 42
Walnut court, Walnut street west- erly .....	Clay	211	10"	188 15
Waltham avenue, flush gate.....		....	....	24 77
West Alvord street, Sumner avenue to Daviston avenue.....	Clay	153 268 550 300 412	24" 20" 18" 15" 12" }	1,546 17
White street, Belmont avenue to Eleanor road.....	Con- crete	374	2'-8"x4'-0" } elliptical }	1,854 18
White street, Belmont avenue to Trillium street .....	Clay	233 191 210	24" 12" 10" }	1,008 39

## SEWER CONSTRUCTION AND RE

LOCATION.	Material.
White street, Longfellow terrace to Trillium street, extension.....	Clay
Whiting street, Plainfield street west- erly, incomplete .....	Clay
Wight place, Water street easterly, extension.....	Clay
Worcester street, manhole.....	

SEWERS ABANDONED—1912.

LOCATION.	Material.	Length in Feet.	Size.	Cost.
Knox street, Mill river to Windsor street.....	Cem.	830	15"	\$113 58
Windsor street southerly .....	Clay	34	15"	47 88
Osgood street, Garden Brook sewer to North street.....	Cem. Clay	588 92	18" } 18" }	1,436 19
Sharon street, Garden Brook sewer to Main street.....	Cem.	331	15"	700 40
Garden Brook sewer easterly...	Cem. Cem.	601 483	18" } 12" }	1,273 96
		2,939		\$3,572 01

SUMMARY.

DESCRIPTION.	Length in Feet.	Cost.
Concrete sewer built by regular appropriation.....	374	\$1,854 13
Clay pipe sewers built by regular appropriation .....	25,534	37,361 14
Flush gates and manholes built by regular appropriation .....		692 84
	25,908	\$39,908 11
Clay pipe sewer built at expense of other Departments..	445	
	26,353	\$39,908 11
Sewers abandoned.....	2,939	3,572 01
Net addition to sewer system.....	23,414	\$36,336 10



## SEWER CLEANING A

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Alden street, . . . . .	.	.	.	.	.
Andrew street, . . . . .	.	.	.	.	.
Arbor street, . . . . .	.	.	.	.	.
Biltmore street. . . . .	.	.	.	.	.
Burr street, . . . . .	.	.	.	.	.
Cass street, . . . . .	.	.	.	.	.
Cedar street, . . . . .	.	.	.	.	.
Center street, I. O., . . . . .	.	.	.	.	.
Clinton street, submerged outlet, . . . . .	.	.	.	.	.
College street, . . . . .	.	.	.	.	.
Columbia terrace, . . . . .	.	.	.	.	.
Congress street, . . . . .	.	.	.	.	.
Cornell street, . . . . .	.	.	.	.	.
Dawes street, . . . . .	.	.	.	.	.
Dickinson street, . . . . .	.	.	.	.	.
Eastern avenue, . . . . .	.	.	.	.	.
Elm street, submerged outlet. . . . .	.	.	.	.	.
Essex street, I. O., . . . . .	.	.	.	.	.
Farnsworth street, . . . . .	.	.	.	.	.
Firglade avenue, . . . . .	.	.	.	.	.
Florence street, . . . . .	.	.	.	.	.
Garden Brook, . . . . .	.	.	.	.	.
Grace street, . . . . .	.	.	.	.	.
Grant street, . . . . .	.	.	.	.	.
Granville street, . . . . .	.	.	.	.	.
Greenleaf street, . . . . .	.	.	.	.	.
Greenwood street, . . . . .	.	.	.	.	.
Hampshire street, . . . . .	.	.	.	.	.
Ingersoll grove, . . . . .	.	.	.	.	.
Kibbe hollow, . . . . .	.	.	.	.	.
Knox street, . . . . .	.	.	.	.	.
Lebanon street, . . . . .	.	.	.	.	.
Lowell street, . . . . .	.	.	.	.	.
Magazine street, . . . . .	.	.	.	.	.

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## SEWER CLEANING AND REPAIRS—CONTINUED.

	COST OF	
	Cleaning.	Repairs.
Main street, . . . . .	\$147 22	
Main street, I. O., . . . . .	48 55	\$7 44
Manhattan street, . . . . .	12 09	
Mapledell street, . . . . .	48 12	3 26
Maplewood terrace, . . . . .	12 75	
Marengo park, . . . . .	30 50	18 48
Margaret street, . . . . .		21 01
Marion street, . . . . .		22 14
Middlesex street, . . . . .	28 12	
Oak street, I. O., . . . . .	13 18	
Oak Grove avenue, . . . . .	86 31	
Orange street, . . . . .	17 34	5 41
Palmer avenue, . . . . .	17 50	
Parker street, I. O., . . . . .	32 25	11 07
Parkwood street, . . . . .		23 23
Pasco street, I. O., . . . . .	16 13	
Patton street, . . . . .	19 06	
Pearl street, . . . . .		12 01
Shattuck street, . . . . .	35 31	
Sundry sewers, costing less than \$10, . . . . .	280 23	507 43
State street, . . . . .	78 74	
Talcott street, . . . . .		11 75
Union street, . . . . .	35 83	
Vernon street, . . . . .	12 50	
Vinton street, . . . . .		15 83
Virginia street, . . . . .		11 05
Waltham avenue, . . . . .	61 88	
Washburn street, . . . . .	17 25	
Water street, . . . . .	24 78	2 79
Willard avenue, . . . . .	52 69	
Willow street, . . . . .	11 44	2 74
Worcester street, I. O., . . . . .	122 87	
Worthington street, submerged outlet, . . . . .	19 05	
	<b>\$2,231 61</b>	<b>\$1,072 59</b>

## GENERAL DESCRIPTIONS.

The total expenditures for new sewer construction and reconstruction during the year amounted to \$3 Deducting cost of sewers abandoned, amounting to \$ leaves \$36,336.10 to be added to the value of the sewers as of November 30, 1911.

The total value of our system on November 30, 1911 accordingly \$1,564,474.65 and embraces a total of 12 of sewers in the care of this department.

All sewer construction during the year has been done directly by this department.

## SEWER FEES.

The receipts from entrance fees exclusive of the account of building private drains amounted to \$ and the number of connections made to building during the year was 474.

## PIPE SEWERS.

The length of pipe sewers laid during the year was 1,000 feet. As may be seen by reference to the table, they are distributed throughout the entire city, not only in the recently opened for residence purposes but also in the older sections, where it has become necessary to replace old sewers with those of larger capacity and improved material.

## TRUNK SEWERS.

A trunk sewer of Portland cement concrete has been laid in White street, from Belmont avenue to Eleanor street.

Work was started this fall and is still in progress. A portion of the trunk sewer designed to drain that section of the city known as East Springfield, starting in at S

avenue and extending through Page boulevard, some 3,400 feet being completed to date.

#### CEMENT PIPE SEWERS.

We have been able this last season to devote considerable time and money to the replacing of the old cement pipe sewers with modern construction, about 2,800 feet being relaid with vitrified clay pipe. There are still remaining some twenty-two miles of cement pipe sewers which should be replaced as rapidly as practicable, as they are a continual source of expense and danger.

#### ACKNOWLEDGMENTS.

It gives me pleasure to acknowledge the co-operation of the foremen and men, and also to thank Aldermen W. A. Dodge, John G. Maxfield, and Edward S. Goldthwaite, members of the Committee on Sewers and Drains, for the many courtesies extended to me.

Respectfully submitted,

HOWARD O. BUCK,

*Acting Superintendent of Sewers.*

BOARD OF ALDERMEN, December 30, 1912.

Read, accepted, ordered printed, and sent down for concurrence.

E. A. NEWELL, *Clerk.*

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COMMON COUNCIL, December 30, 1912.

Read and concurred.

GEO. J. CLARK, *Clerk.*

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Presented to the Mayor, for approval, December 31, 1912.

E. A. NEWELL, *City Clerk.*

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MAYOR'S OFFICE, SPRINGFIELD, MASS., December 31, 1912.

Approved.

EDWARD H. LATHROP, *Mayor.*

# CITY OF SPRINGFIELD,

SEWER SYSTEM TABULATED TO DECEMBER 1, 1912.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Abbe ave., Fisk ave., west- erly .....	301 275 300	15" 12" 18"	Clay Clay Clay	\$497.38
Plainfield st., westerly ...	300 301 200	15" 12" 10"	Clay Clay Clay	
*Acorn st., Sycamore to Edgewood st.....	276	10"	Clay	
Acushnet ave., Main st., easterly .....	294 279 271 26	20" 18" 15" 12"	Clay Clay Clay Clay	1,405.16
Adams st., Main to Ashmun st.....	294 245 323 221	20" 18" 15" 12"	Clay Clay Clay Clay	
Richelieu st., westerly....	237	12"	Clay	
Albemarle st., Wilbraham road, southerly .....	300 314 421	15" 12" 10"	Clay Clay Clay	3,267.83
Alden st., Hancock st. to Eastern ave.....	595 820	18" 15"	Cem. Cem.	
Eastern ave. to Wilbra- ham ave.....	895	15"	Clay	
Wilbraham ave. to Hick- ory st.....	499	10"	Clay	2,808.38
Alderman st., Dickinson to Scott st.....	296 304 300 443	18" 15" 12" 10"	Clay Clay Clay Clay	
Alexander st., North st., easterly.....	288	10"	Clay	
Alfred st., Birnie ave., east- erly.....	377	10"	Clay	232.73
Allen ave., Allen st., easterly	338	10"	Clay	
Allen st., Mill river to Oak- land st.....	216	24"	Clay	
Mill to Oakland st.....	365	10"	Clay	1,701.91
Oakland st. to Plumtree road.....	686 383 474	24" 18" 15"	Clay Clay Clay	
	580	12"	Clay	
	1,603	12"	Clay	984.62
	1,401	10"	Clay	
				6,493.10

\* Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	
Allendale st., North st., easterly.....	272 340	12" 10"	Clay Clay	}
Amaron st., State st., south- erly.....	349	10"	Clay	
Amherst st., Harvard st., northerly.....	441 25	12" 10"	Cem. Clay	\$146 23
Princeton to Monmouth st.	512 191	12" 10"	Clay Clay	
Andrew st., State st., north- erly.....	463 422 382	20" 18" 12"	Clay Clay Clay	}
Applewood place, Belmont ave., northerly.....	469	10"	Clay	
Arbor st., Butler to Carew st.	398	12"	Clay	
Arch st. (see Garden brook)				
Armory hill sewer (see pri- vate ways).				
Armory st., Worthington st., southerly.....	570	15"	Cem.	754
Summer st., southerly...	374 325	12" 10"	Clay Clay	384 193
B. & A. R. R. to Liberty st.	690 360 271	15" 12" 10"	Clay Clay Clay	1,165
Liberty to Sullivan st. ....	450	1'-10"x2'-9"	Brick	
Sullivan to Carew st. ....	476 156 267	1'-8"x2'-6" 24" 20"	Brick Clay Clay	2,439 1,006
Carew st., northerly .....	290 452	12" 20"	Clay Clay	
Springfield st., southerly .	803 31 146	10" 20" 18"	Clay Clay Clay	1,209. 317.
Ashley st., Cedar st., easterly	65 580 697	18" 15" 12"	Cem. Cem. Cem.	
Ashmont st., Belmont ave., northeasterly.....	250 200	12" 10"	Clay Clay	}
Atwater terrace, Springfield st., northerly.....	1020	18"	Clay	
Atwater road, Greene lane, westerly .....	322 199	20" 18"	Clay Clay	}
Auburn st., Fulton st., east- erly.....	397 335	12" 10"	Clay Clay	
Austin st., State st., northerly	363	10"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Autumn st., Summer to Worthington st.....	239	15"	Clay	\$715.29
Avon place, Maple st., east- erly.....	695	24"	Clay	3,359.45
Bancroft st., Garden brook to Chestnut st.....	1,361	3'-4"x5'-0"	Brick	8,914.04
including Chestnut st., Bancroft to Montmo- rency st.....	379	3'-2"x4'-9"	Brick	
Montmorency st., Chest- nut st., easterly.....	43	3'-2"x4'-9"	Brick	
Bay st., St. James ave. to Pleasant st.....	250	15"	Clay	\$715.01
	245	12"	Clay	
	228	10"	Clay	
Florida to Pleasant st....	235	12"	Clay	321.02
Florida to Sherman st....	304	20"	Clay	1,092.89
	377	18"	Clay	
	812	15"	Clay	
Sherman to Clarendon st.	151	8"	Cem.	46.82
Catharine to Clarendon st.	194	10"	Clay	200.66
Bowles to Cambridge st.	1,037	2'-8"x4'-0"	Brick	8,056.62
	360	2'-2"x3'-3"	Brick	
	332	24"	Clay	
Cambridge to Sycamore st.	360	20"	Clay	1,348.03
Beacon st., Eastern ave. to Colton st.....	250	10"	Clay	152.81
Colton st., easterly.....	106	8"	Clay	75.08
				227.89
Beaudry st., I. O., Main st., southerly.....	300	12"	Clay	745.95
	270	10"	Clay	
Beaumont st., Belmont ave., northerly.....	250	12"	Clay	
	431	10"	Clay	403.87
Belmont ave. to Sumner ave.....	264	10"	Clay	183.91
Beech st., Central st., north- erly.....	410	10"	Cem.	587.78
Beechwood ave., Sumner to Spruceland ave.....	595	12"	Clay	124.37
Belgrade place, Walnut st., westerly.....	220	8"	Clay	.....
	140	6"	Clay	
	300	18"	Clay	
Bellevue ave., Belmont ave., easterly.....	300	15"	Clay	.....
	194	12"	Clay	
	744	10"	Clay	
Dickinson st., westerly...				.....
Belmont ave., Fort Pleasant ave., easterly.....	90	10"	Clay	93.92



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	
Mill river to Woodside ter.	954	20"	Clay	\$2,69
Woodside ter. to Litchfield	660	2'- 0"x3'-0"	Brick	11,75
	445	1'-10"x2'-9"	Brick	
	595	1'- 8"x2'-6"	Brick	
	550	1'- 6"x2'-3"	Brick	
Litchfield st. to Kenwood	432	20"	Clay	1,49
Park	493	18"	Clay	
Kenwood Park to Sumner	301	15"	Clay	87
ave.	403	12"	Clay	
	616	10"	Clay	
*Sumner ave. to Wood-	830	3'- 4"x5'-0"	Brick	8,21
lawn st.	819	3'- 0"x4'-6"	Brick	
	245	3'- 0"x4'-6"	Br.C.	3,47
	416	2'-10"x4'-3"	Br.C.	
*Woodlawn to White st.	1,637	2'-10"x4'-3"	Con.	7,23
Belmont place, Belmont				
ave., southerly	216	10"	Clay	
Belvidere avenue,	300	20"	Clay	
Belmont ave., southerly	201	18"	Clay	
Benton ave., Benton st.,	300	10"	Clay	
easterly	325	8"	Clay	
Benton st., State st., south-	301	12"	Clay	
erly	300	10"	Clay	51
	247	8"	Clay	
	320	8"	Clay	41
Berendo st., Grenada ter-				
race to Alderman st.	345	12"	Clay	
Berkeley st., Princeton to				
Monmouth st.	483	12"	Clay	
Berkshire st., I. O.				
Oak to Myrtle st.	701	12"	Cem.	94
Oak st., easterly	387	12"	Clay	38
Chestnut to Myrtle st.	577	12"	Clay	54
Besse place, Main st., west-				
erly	290	10"	Clay	
Biltmore st., Dickinson st.	350	15"	Clay	
to Trafton road	349	12"	Clay	
	351	10"	Clay	
Birnie ave., Wason ave.,				
northerly and easterly	896	24"	Clay	1,53
to North Main st.	174	15"	Clay	
Wason ave., southerly	350	18"	Clay	1,02
	417	15"	Clay	
Worcester st. extension,				
northerly to Grace st.	162	15"	Cem.	
Worcester st. extension,				
southerly to Walter st.	144	12"	Cem.	

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Douglas st., northerly . . .	292	24"	Clay	\$1,149.93
	303	20"	Clay	
	304	15"	Clay	
	144	10"	Clay	
Douglas st., to near Hooker st. . . . .	373	1'-10"x2'-9"	Brick	1,319.73
	312	20"	Clay	768.74
	316	18"	Clay	
	168	15"	Clay	
Arch to Hooker st. . . . .	1,048	24"	Clay	158.56
Birnie ave. extension, Arch st., southerly . . . . .	445	10"	Clay	.....
Blaine st., White to Green- brier st. . . . .	118	24"	Clay	268.98
Blake hill, Fort Pleasant ave., easterly . . . . .	244	10"	Clay	236.22
Bliss st., from Main to N. Y., N. H. & H. R. R. . .	1,284	12"	Cem.	1,190.68
Bloomfield st., Oakland st., easterly . . . . .	500	18"	Clay	1,326.47
	397	15"	Clay	
Bond place, including 41 feet in Bridge st. (for cost see Symonds ave.) . . . .	203	12"	Cem.	.....
Bond st., Garden brook sewer to Chestnut st. . .	341	2'-0"x3'-0"	Brick	1,580.25
	959	24"	Clay	2,261.42
				3,841.67
Bowdoin st., Worthington st., southerly . . . . .	660	15"	Cem.	762.11
	285	12"	Clay	371.52
Worthington to Ingersoll grove . . . . .	819	12"	Cem.	758.64
				1,892.27
Bowles st., Bay to McKnight	695	15"	Cem.	1,083.39
	64	15"	Clay	136.50
Pease st., northerly . . . .	275	8"	Clay	62.76
				1,282.65
Boylston st., Cypress to Clin- ton st. . . . .	610	18"	Cem.	1,638.72
	346	15"	Cem.	
Burlington st., Belmont ave., northerly . . . . .	137	10"	Clay	.....
Bradford st., North Main to Fulton st. . . . .	352	15"	Cem.	1,301.99
	758	12"	Cem.	
	798	12"	Cem.	
Bridge st., Main st. to Conn. river . . . . .	275	15"	Clay	762.38
				429.14
Main to Chestnut st. . . . .	1,158	2'-0"x3'-0"	Brick	5,414.20
				6,605.72
Brightwood ave., Plainfield st., westerly . . . . .	171	15"	Clay	178.00
Bristol st., Wilbraham road to Marlborough st. . . .	299	15"	Clay	
	560	12"	Clay	

SECRET

[illegible]

### Acknowledgements

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Massasoit st., easterly....	580	18"	Cem.	\$671.51
	200	12"	Cem.	153.28
Prospect to Armory st....	989	2'-8" cir.	Con. }	8,513.49
	1,365	2'-6"x3'-9"	Con. }	
Armory st., easterly.....	1,101	10"	Clay }	2,400.86
	448	8"	Clay }	
Liberty st., easterly.....	502	15"	Clay }	
	499	12"	Clay }	
	434	10"	Clay }	—\$33,690.67
Carlisle st., Wilbraham road, southerly.....	400	10"	Clay }	355.69
	246	8"	Clay }	
Cass st., Liberty to Franklin st.....	500	12"	Clay }	575.28
	163	10"	Clay }	
Linden st., southerly....	596	15"	Clay }	892.07
Linden st., northerly....	224	12"	Clay }	
				—1,467.35
Catharine st., Dartmouth to McKnight st.....	833	2'-0"x3'-0"	Brick }	4,428.92
State to McKnight st....	348	15"	Clay }	
	438	12"	Clay }	1,348.95
	333	10"	Clay }	
				—5,777.87
Cedar st., Pine to Walnut st.	180	3'-10"x5'-9"	Brick }	889.35
	1,074	3'-8"x5'-6"	Brick }	
Pine st., westerly.....	378	12"	Cem.	324.09
				—7,420.17
Cedar st., I. O., Main to river.....	433	2'-0"x3'-0"	Brick }	2,001.44
Main to Centre st.....	274	12"	Clay }	
				—263.92
				2,265.36
Cemetery brook (see private ways).				
Center street, Oak Grove ave., northerly.....	1,008	10"	Clay	353.08
Centre st., I. O., Oak to Pine st.....	463	12"	Cem.	546.58
Pine to Cedar st.....	349	12"	Clay }	668.19
	300	10"	Clay }	
Cedar st., easterly.....	400	10"	Clay }	371.71
				—1,586.48

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	
Central st., Main st., easterly	99	15"	Cem.	\$147.6
	546	12"	Cem.	385.4
Main to Maple st. ....	63	2'-0"x3'-0"	Brick	119.5
	463	2'-0"x3'-0"	Con.	2,332.1
	460	24"	Clay }	2,665.2
	434	20"	Clay }	
near Maple st. to Sterns	581	18"	Clay	918.2
terrace.....	105	12"	Clay	199.9
Sterns terrace to Cedar st.	334	18"	Cem.	102.5
Pine st., westerly.....	500	12"	Cem.	568.4
Pine to Spruce st.....	339	12"	Cem.	376.0
	335	12"	Clay }	514.0
	310	10"	Clay }	
Spruce to Hancock st. ....	861	20"	Clay	1,344.5
Hancock to Mill st. ....	597	2'-0"x3'-0"	Brick	2,135.3
Mill st. to Mill river.....	40	24"	Clay	136.8
Chapel st., Eastern ave., easterly.....	400	10"	Clay	
Chapin terrace, Chestnut st., easterly.....	327	15"	Clay }	
	279	12"	Clay }	
Chase ave., Fort Pleasant ave., easterly.....	238	12"	Clay }	
	333	10"	Clay }	
Charles st., Liberty to Franklin st. ....	27	12"	Clay }	647.1
	620	12"	Cem }	
Liberty st., southerly ..	29	12"	Clay	12.9
Charter ave., Walnut st., easterly .....	527	12"	Clay	
Cherrellyn ave., Phoenix st., southerly.....	300	15"	Clay	410.6
	651	12"	Clay	574.7
Cherry st., Mill river to Central st.....	398	18"	Clay }	
	434	15"	Clay }	
	251	12"	Clay }	
	295	10"	Clay }	
Cherryvale ave., Longhill st. to Florentine gardens	596	10"	Clay	
Chester st., Mill st., northerly	459	12"	Clay }	509.1
	161	10"	Clay }	
	112	8"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Chestnut st., Edwards st., southerly.....	575	12"	Cem.	\$579.02
Mattoon st., southerly...	288	15"	Cem.	319.69
Pearl to Mattoon st.....	313	1'-4"x2'-0"	Brick	445.40
Pearl to Bridge st.....	143	1'-8"x2'-6"	Brick	599.51
Bridge to Worthington st.	480	2'-0" cir.	Brick	.....
Worthington to Bridge st.	353	24"	Clay	1,148.06
Worthington to Taylor st.	60	18"	Cem.	.....
	244	12"	Cem.	291.17
Lyman st. to B. & A. R.R.	134	18"	Cem.	.....
	72	12"	Cem.	355.41
Franklin st., southerly...	500	12"	Cem.	358.75
Franklin st., northerly...	397	12"	Cem.	294.14
Essex to Everett st.....	374	15"	Cem.	586.72
Carew st., southerly.....	126	8"	Clay	100.68
Carew to Prospect st.....	424	24"	Clay	.....
	537	20"	Clay	1,618.64
Prospect st., northerly...	220	12"	Cem.	178.88
Bancroft st., southerly...	172	12"	Cem.	123.00
	108	12"	Clay	.....
	19	10"	Clay	190.55
Bancroft to Montmorenci st.....	391	15"	Cem.	535.24
Bancroft to Montmorenci st. (see Bancroft st.)...	.....	3'-2"x4'-9"	Brick	.....
Montmorenci to Waverly st.....	185	12"	Cem.	252.23
	717	12"	Clay	807.01
Douglas st., southerly...	450	10"	Clay	385.61
Douglas to Springfield (see Springfield st.)....	.....	3'-6" cir.	Brick	.....
Merwin st., southerly...	178	10"	Clay	.....
Eagle st., northerly.....	87	15"	Clay	.....
Eagle st., southerly.....	171	10"	Clay	.....
				\$9,169.71
Chestnut st., I. O., Worces- ter to Hampden st.....	342	15"	Cem.	340.25
	30	15"	Clay	55.26
Hampden to Berkshire st.	307	15"	Clay	342.65
				738.16
Chilson st., Sumner ave., southerly.....	226	10"	Clay	153.57
Church st., Garden brook to North st.....	556	18"	Clay	1,440.68
	80	15"	Cem.	157.23
				1,597.91
Churchill st., Sumner ave. to Garfield st.....	580	12"	Clay	84.12
	55	8"	Clay	6.89
				91.01

## SEWER SYSTEM.

NAME OF SEWER.	Length in Feet.	Si
Clantoy st., Phoenix to Du- pont st.....	398 517 241	1 1 10
Claremont st., Orange st., southerly.....	492	10
Clarendon st., Worthington st., westerly.....	205	10
Worthington to St. James ave.....	336	13
St. James ave. to Sherman st.....	280 605	1 1
Clark st., Hancock st., west- erly.....	520	10
Clayton st., Plainfield st., westerly.....	299 100	1 1
Clermont st., I. O., Healey ave., easterly.....	150	10
Cleveland st., Armory to Liberty st.....	274 250 276 284	1 1 1 1
Clifford st., Bay st., north- erly.....	250 119	1 10
Clifton ave., Central st., southerly.....	398	3
Cliftwood st., Sumner ave., southerly.....	464	10
Clinton st., Fulton to Boyl- ston st.....	150	10
Boylston st., easterly ....	410	1
submerged outlet.....	176 24	2 2
Conn. river to Fulton st.. Fulton st., Clinton to Sar- geant st.....	593	4'-10"
Sargeant st., Fulton to Main st.....		
Carew st., Main st. to Garden brook.....		
(For lengths and sizes see individual streets.)....		
Clyde st., Plainfield st., westerly.....	350 350 271	1 1 1

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
College st., State st. to Shattuck ave.....	839	12"	Clay	\$207.53
*Shattuck ave. to Acorn st.	311	12"	Clay	457.62
	900	10"	Clay	
State st. to Wilbraham road.....	34	12"	Clay	
	443	10"	Clay	387.72
				<hr/> \$1,052.87
Collins st., Eastern ave. to Logan st.....	300	12"	Clay	457.04
	269	10"	Clay	
Colonial ave., State st., southerly.....	326	12"	Clay	25.65
	348	10"	Clay	
Colton st., Wilbraham road to Beacon st.....	448	18"	Clay	2,015.70
	569	15"	Clay	
	658	12"	Clay	
Columbia terrace, Liberty st., north and east....	498	10"	Clay	....
Commonwealth ave., Bel- mont to Washington ave.....	441	24"	Clay	2,878.00
	500	20"	Clay	
	549	18"	Clay	
Washington ave. to Fair- view st.....	691	15"	Clay	720.72
				<hr/> 3,598.72
Concord terrace, Wilbraham road, northerly.....	253	10"	Clay	255.13
Congress st., Garden brook to Main st.....	53	12"	Cem.	75.46
	319	12"	Clay	705.44
Garden brook to Chestnut st.....	133	20"	Clay	1,463.00
	198	18"	Clay	
	369	15"	Clay	
	288	12"	Clay	277.22
	119	15"	Cem.	
	76	10"	Cem.	
				<hr/> 2,521.12
Continental st., Sumner ave. southerly.....	215	12"	Clay	102.05
	266	10"	Clay	
Converse st., Sumner ave. to Vermont st.....	506	18"	Clay	443.87
Cook's ave., Worthington st. to N. Church ave.....	117	15"	Cem.	573.84
N Church ave. southerly (includes cost of N. Church ave.).....	69	10"	Cem.	

\* Sanitary sewer.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Cornell st., Dartmouth ter- race to Wellesley st....	185	15"	Clay }	\$543.05
Wellesley st., easterly....	374	12"	Clay }	208.20
Princeton st., westerly....	186	10"	Cem.	47.30
	52	10"	Clay	88.04
Princeton st., easterly....	86	10"	Cem.	132.12
	181	10"	Clay	180.93
	120			\$1,199.64
Cortland st., State st., north- erly.....	164	15"	Clay }	672.01
Cottage ave. (see Melrose st.)	621	12"	Clay }	
Court st., Court Square ave., westerly.....	461	12"	Cem.	621.55
Main st. to Court Sq. ave.	200	12"	Cem.	309.67
Crane st., Franklin st., northerly.....	299	10"	Clay	931.22
Crosby st., Walnut st., west- erly.....	321	10'	Clay	331.87
Cross st., Main to Willow st.	388	18"	Clay	231.38
Willow st., easterly.....	363	12"	Cem.	878.12
				352.25
				1,230.37
Crystal ave., Belmont ave., easterly.....	251	15"	Clay }	24.07
	250	12"	Clay }	
	298	10"	Clay }	
*Dickinson st., westerly..	362	15"	Clay }	650.64
	372	12"	Clay }	674.71
Cumberland st., Chestnut st., westerly.....	167	10"	Clay	125.29
North Main to North st...	205	15"	Clay	300.96
	238	12"	Clay	284.06
Cypress ave., Cypress st., northerly.....	360	12"	Cem.	710.31
	40	12"	Clay	484.08
				23.78
Cypress st., Conn. river to Garden brook in Ferry st.....	1,081	3'-4"x5'-0"	Brick	507.86
†Connecticut river to Ful- ton st.....	385	4'-10"x7'-3"	'Con.	10,048.85
†Fulton to Main st.....	691	4'-2"x6'-3"	'Con.	3,890.53
Dale st., northerly from sewer 60 ft. south of Hubbard ave.....	203	10"	Clay	6,470.80
Winthrop st., southerly..	46	8"	Clay	20,410.18
				184.27
				13.08
				197.35
Dartmouth st., St. James ave. to Yale st.....	973	3'-0"x4'-6"	Brick }	8,247.06
Yale to Bowles st.....	295	2'-6"x3'-9"	Brick }	

\* Surface drainage only. † Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Dartmouth terrace, Worth- ington to Cornell st....	499 357 177	20" 18" 15"	Clay Clay Clay	\$2,213.06
Davis court, Bridge st. to Harrison ave.....	450	12"	Clay	
Daviston ave., Allen to West Alvord st.....	403	10"	Clay	
West Alvord to East Alvord st.....	400	10"	Clay	796.55
East Alvord st., south- easterly.....	299	10"	Clay	
Dawes st., Bay st., southerly	229 380 518	15" 12" 10"	Clay Clay Clay	
Dawson ave., White street, westerly.....	350	10"	Clay	118.35
Daytona st., Belmont to Sumner ave.....	524	12"	Clay	500.44
Demand ave., Fisk ave., westerly.....	510	12"	Clay	642.06
Plainfield st., easterly....	403	12"	Clay	
Dexter st., Knox to Pine st..	558 226	12" 10"	Cem. Clay	
				\$98.45 245.10
				343.55
Dickinson st., Mill st. to Sumner ave.....	35 60 251 679 *460 *869 *1,040 *996	4'-6" cir. 2'-1"x5'-0" 5'-0" cir. 4'-0" cir. 4'-10"x7'-3" 4'-8"x7'-0" 4'-4"x6'-6" 4'-2"x6'-3"	Brick Con. Brick Brick Brick Brick Brick Brick	44,552.11
Sumner ave., southerly ..	1,379 324 434 312	2'-6"x3'-9" 2'-4"x3'-6" 2'-0"x3'-0" 1'-10"x2'-9"	Brick Brick Brick Brick	
				8,760.53
Donald st., Birnie ave., east- erly.....	315	10"	Clay	53,312.64
Dorchester st., St. James ave. to Amherst st.....	364 238	12" 10"	Clay Clay	406.60 417.70
Dorne st., Smith st., north- erly.....	219	12"	Clay	182.12
Douglas st., B.&M. R. R. to North Main st. (see Rowland ave.).....	.....	.....	.....	.....
North Main to Chestnut st.....	424 442	4'-6" cir. 4'-0" cir.	Brick Brick	4,805.19

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Dresden st., State st., southerly.....	359	12"	Clay }	\$25.14
Dunmoreland st., Wilbra- road, southerly .....	321	10"	Clay }	
	301	15"	Clay }	
	200	12"	Clay }	604.37
*Dwight st., Sanford to State Sanford to Harrison ave. .	258	2'-8"x4'-0"	Brick	\$1,571.86
	253	20"	Clay }	1,441.27
	229	18"	Clay }	
	199	15"	Clay }	
Harrison ave., northerly..	129	12"	Clay	319.96
Hillman st., southerly....	226	10"	Clay	257.25
Hillman st., northerly....	103	10"	Clay	388.28
Worthington st., southerly	269	12"	Clay	433.91
Worthington st., northerly	342	12"	Cem.	374.73
Dymon st., Walnut st., east- erly.....	415	12"	Cem.	4,787.26
Eagle st., North Main to Chestnut st.....	643	15"	Clay	385.92
East Alvord st., West Alvord st. to Daviston avenue.	495	18"	Clay }	956.64
	598	12"	Clay }	
East Court st., Dwight st., westerly.....	206	12"	Clay }	
	62	10"	Clay }	303.10
East Hooker st., North Main to North st.....	444	10"	Cem.	39.04
	255	10"	Clay	....
				39.04
Eastern ave., Watershops pond to Manhattan st. .	1,164	24"	Clay	2,164.43
Manhattan to Alden st. .	338	20"	Clay	636.21
Alden to Collins st.....	231	12"	Clay	313.99
Greene st., southerly.....	125	8"	Clay	69.58
Greene to Ladd st.....	38	15"	Clay	67.21
Olive st., southerly .....	169	8"	Clay	167.87
Lebanon to Olive st.....	159	12"	Cem.	190.96
Lebanon to King st.....	194	12"	Cem.	351.89
	55	12"	Clay	95.43
King to Chapel st.....	152	10"	Cem.	166.50
	101	10"	Clay	149.70
Pendleton ave., northerly.	312	12"	Cem.	256.78
Tyler st., northerly.....	286	12"	Cem.	181.30
Quincy st., northerly....	118	10"	Cem.	131.15
Monroe st., southerly....	28	12"	Cem.	45.09
	210	8"	Clay	179.00
Monroe st., northerly....	29	12"	Cem.	51.50
	128	8"	Clay	90.66
				5,309.25
Eddywood ave., Sumner ave., northerly.....	328	10"	Clay	436.66
Edgemont st., State st., northerly.....	499	10"	Clay }	510.70
	201	8"	Clay }	

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
*Edgewood st., Acorn to Bay st.....	1,001	8"	Clay	\$443.73
Edwards st., Chestnut st., easterly.....	551	12"	Cem.	404.88
Elliott st., Salem st., south- erly.....	610 243	15" 12"	Cem. Cem.	\$730.48 341.99
Elm st., submerged outlet..	191	24"	Wood	1,700.79
	26	24"	C. Iron	359.80
Conn. river to Water st..	385	3'-9" cir.	Brick }	10,744.19
Water to Main st.....	996	3'-8"x5'-6"	Brick }	12,804.78
Elmwood st., Main to Han- over st.....	300 249 299	18" 15" 12"	Clay Clay Clay }	1,058.02
Emery st., Boylston st., east and west.....	542	12"	Cem.	616.36
Essex street, Garden brook, westerly.....	418	15"	Cem.	355.00
Garden brook to Chestnut st.....	1,115 204	2'-2"x3'-3" 18"	Brick Cem.	7,105.10 355.33
Essex st., I. O., Oak to Myrtle st.....	254 426	12" 10"	Clay }	662.25
Oak st., easterly.....	183	10"	Clay }	248.23
				910.48
Euclid ave., Belmont ave. to Dickinson st.....	389 741	12" 10"	Clay }	1,102.00
	77	8"	Clay }	50.67
†Dickinson st., westerly..	350	15"	Clay }	773.10
	350	12"	Clay }	332.10
Dickinson st., easterly ...	275	10"	Clay }	2,257.87
Everett st., Chestnut st. to brook.....	323	15"	Cem.	308.39
brook to Cass st.....	926	15"	Clay	821.43
Cass st., easterly.....	313	15"	Clay	617.45
				1,747.27
Fairbanks place, Worthing- ton st., northerly.....	249	10"	Clay	220.66
Fairfield st., Litchfield to Garfield st.....	376 556	12" 10"	Clay Clay	351.64
				351.64

\* Sanitary sewer. † Surface drainage only.

## SEWER SYSTEM.

NAME OF SEWER.	Length in Feet.	S
Fairmount st., Common- wealth ave. to Lawn- dale st.....	350	1
Farnsworth st., Hamburg st. to Chicopee line.....	530	2
	279	1
	248	1
	264	1
Federal st., Worthington to Pearl st.....	567	1
Summer st., southerly ...	274	1
Ferry st., Main to Garden brook (see Cypress st.) ..	....	-
Garden brook to Chestnut st.....	1,168	2'-4
Main st., easterly.....	*394	4'-2
	1,004	4'-8
Firglade ave., Sumner ave. to Spruceland st.....	350	1
	203	
Spruceland to Pineywoods avenue.....	447	1
	67	
Pineywoods ave. to Wash- ington boulevard.....	242	1
	176	1
Fisk ave., Rowland to Wor- cester ave.....	272	2
	275	2
	298	1
Wason ave., southerly....	299	2
	294	2
	248	1
Florence st., Pine st., east- erly.....	824	1
	651	1
Hancock st., easterly ....	253	1
	26	1
Florentine gardens, Piney- woods ave., northerly..	421	1
Florida st., Worthington to Ingersoll Grove st.....	555	1
	279	1
Worthington to St. James ave.....	935	2'-2
St. James ave. to Bay st.	599	2

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Forest st., Belmont to Forest Park ave.....	419 255	12" 10"	Clay Clay }	\$651.93
Forest Park ave., Fort Pleas- ant ave. to Garfield st.	1,081 325 562	24" 20" 18"	Clay Clay Clay }	.... \$1,217.48
Sumner ave., northerly ..	567	12"	Clay	123.15
Sumner ave., southerly...	66	10"	Clay	318.29
Pineywoods ave., north- erly.....	438 380	10" 10"	Clay Clay	33.87
Fort st., Main to Water st..	633	12"	Cem.	1,692.79
Fort Pleasant ave., Mill river to Sumner ave....	888 1,825	2'-4"x3'-6" 2'-0"x3'-0"	Brick Brick }	633.43 13,339.80
Mill st., southerly.....	428	12"	Clay	293.42
Foster st., Knox st., easterly	511 224	12" 12"	Clay Cem.	517.25 34.68
Franklin st., Garden brook sewer to Main st.....	434	18"	Cem.	593.13
Garden brook sewer to Chestnut st.....	919 295	2'-2"x3'-3" 20"	Con. Clay	4,106.84 652.82
Chestnut to Charles st. .	273	15"	Clay	303.37
Charles st., easterly.....	670	12"	Clay	502.35
Cass to Murray Hill ave.	621 330	12" 10"	Clay Clay }	1,026.61
Nursery st., westerly.....	207	15"	Clay	....
Nursery to Genesee st....	107 557	15" 15"	Clay Cem.	199.93
	27	12"	Clay	57.66
Fremont st., Main to Water st.....	780	1'-6"x1'-7"	Brick	702.45
Main st., westerly.....	656 30	12" 12"	Cem. Clay	692.92 65.21
Fulton st., Cypress to Clin- ton st.....	944	12"	Cem.	826.66
*Clinton to Sargeant st. (cost shown under Clin- ton st.).....	1,080 42	4'-8"x7'-0" 4'-10"x7'-3"	Brick Brick }	.... ....
Sargeant to John st. ....	555	15"	Cem.	1,219.02
John st., northerly.....	314 408	12" 10"	Clay Clay }	674.48
Garden brook sewer (see private ways).				2,720.16

\* Elliptical.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER	Length in Feet.	Size.	Ma- terial.	Co
Gardner ave., Gardner st. northerly.....	151	8"	Clay	
Gardner st., Hanover to Water st.....	655	2'-0"x3'-0"	Brick	\$1,995.23
Water to Main st.....	226	12"	Clay }	423.56
	199	10"	Clay }	
Garfield st., Forest Park ave., easterly.....	556	15"	Clay }	967.16
	514	12"	Clay }	
	531	10"	Clay }	329.87
Belmont ave., westerly...	200	10"	Clay	
Genesee st., Franklin st.. southerly.....	409	10"	Clay	
George st., Dexter st., south- erly.....	409	10"	Clay	
Girard ave., Bay to Mc- Knight st.....	944	12"	Clay	
Goodrich st., Liberty st.. northerly.....	240	10"	Clay	
Gordon st., Pasadena ave. to White st.....	618	15"	Clay	
Governor st., Armory st. to Pensacook ave.....	424	20"	Clay }	
	401	18"	Clay }	
	402	15"	Clay }	
	224	12"	Clay }	
Grace st., Birnie ave., east- erly.....	274	15"	Cem.	
Grand st., Revere st., east- erly.....	250	15"	Clay }	
	252	12"	Clay }	
Revere st., westerly.....	151	10"	Clay	
Grant st., Magazine to Ar- mory st.....	588	12"	Cem.	
Granville st., Eastern ave. to Logan st.....	495	12"	Cem.	
Gray's ave., Cypress ave.. northerly.....	495	12"	Cem.	
Greenacre sq. (north), Fos- ter st., easterly.....	201	10"	Clay	
Greenacre sq. (south), Fos- ter st., easterly.....	246	10"	Clay	
Greenbrier st., Larkspur to Trillium st.....	300	10"	Clay }	
Blaine to Trillium st.....	270	10"	Clay }	
Greene st., Hancock to Eastern ave.....	610	18"	Cem. }	
	793	15"	Cem. }	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Greene lane, Rimmon ave., westerly and northerly.	744 143	12" 10"	Clay Clay	.... ..
Greenleaf st., Sumner ave. to Garfield st.....	527	12"	Clay	\$133.60
Greenwich st., Birnie ave., easterly.....	300 300	12" 10"	Clay Clay }	467.79
Greenwood st., Garden brook to Main st.....	386 538	12" 15"	Cem. Clay }	2,167.12
Garden brook, easterly...	448	12"	Clay }	
	117	10"	Clay }	
Grenada terrace, Dickinson to Ventura st.....	220 310	18" 15"	Clay Clay }	\$708.45
Ventura st., easterly.....	309 216	12" 10"	Clay Clay }	397.28
Grosvenor st., North to Chestnut st.....	131 648	18" 15"	Cem. Cem }	1,105.73 721.17
Grove st., North Main st., easterly.....	409	10"	Clay }	442.65
North st., westerly.....	270	10"	Clay }	
Groveland ave., Dickinson st. to town line.....	533 117	12" 10"	Clay Clay }	525.19
Grover st., Armory to Lib- erty st.....	300 303 298 432	18" 15" 12" 10"	Clay Clay Clay Clay }	910.58
Hall st., Belmont ave. to Dickinson st.....	500 474	12" 10"	Clay Clay }	904.55
*Dickinson st., southerly.	774	12"	Clay	698.29
Hamburg st., Springfield st., easterly.....	367 235	20" 10"	Clay Clay }	1,602.84 1,067.20
Hampden st., Water to Main st.....	569	15"	Cem.	762.57
Hampden st., I. O., Chest- nut st., easterly.....	285 174	12" 12"	Cem. Clay }	187.28 299.12
Holly st., easterly.....	150	10"	Clay	165.26
Pine st., westerly.....	200 199	12" 10"	Clay Clay }	311.59
				963.25

\* Surface drainage only.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Co-
Hampshire st., I O. Oak st. westward	200 298	12" 10"	Clay Clay	9633.53
Oak st., eastward	250	12"	Cem.	
Pine st., westward	224	10"	Clay	
Myrtle st., westward	200	10"	Clay	
Hancock st., Mill river to Central st.	930	12"	Clay	995.01
Central to Walnut st.	218	18"	Cem.	1,574.54
Walnut to Alden st.	1,345	15"	Cem.	
Alden to Lebanon st.	122	12"	Cem.	88.00
Lebanon to Quincey st.	827	2'-0" 15'-0"	Brick	5,009.61
Walnut through Leb- anon to Quincey st.	1,852	3'-6" 15'-3"	Brick	21,668.05
Quincey to State st.	913	3'-4" 15'-0"	Brick	
Hanover st., York to Gard- ner st.	820	2'-2" 15'-3"	Brick	
Hanover st., North Main to North st.	250 207	15" 12"	Clay Clay	377.15
North st., eastward	330	10"	Clay	172.92
Harrison ave., Main to Chester st.	600 250	15" 8"	Cem. Clay	874.21
Harvard st., York st. to St. James st.	376 340	18" 15"	Clay Clay	998.28
St. James st., to Jerome st.	291 78	12" 12"	Cem. Cem.	366.84
Hawley st., State st. to North st.	110	12"	Cem.	
Monroe st., to North st.	110	12"	Cem.	
Hawthorne st., Harvard st. to westward	140 441	12" 12"	Clay Cem.	
Harben st., State st. to North st.	137 224	12" 12"	Clay Clay	
Healey ave., North Main to Pine st., westward	110 28	8" 12"	Clay Clay	
Hedden st., to North Main st.	70	12"	Clay	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Hiawatha st., White st., westerly.....	383	10"	Clay	\$268.30
Hickory st., Mill river inter- cepting sewer to Alden st.....	754 228 184	20" 18" 15"	Clay Clay Clay	2,446.84
	788	12"	Clay	
High st., Maple st. to Ingraham ave.....	523 567	18" 15"	Clay Clay	\$1,958.92
	550	12"	Clay	
Ingraham ave., easterly..	846	12"	Clay	
				987.71
				2,946.63
Hillman st., Main to Dwight st.....	350 380	15" 12"	Clay Clay	1,436.30
Hillside place, Richelieu court, easterly.....	106	8"	Clay	
Holly st., I.O., Worcester to Hampden st.....	377	15"	Clay	419.11
Hampden st., southerly ..	175	12"	Clay	117.69
				536.80
Hollywood st., Common- wealth ave., easterly...	211 241	12" 10"	Clay Clay	445.87
Dickinson st., easterly...	174	10"	Clay	
				121.04
				566.91
Holyoke st., Main st., west- erly.....	734	12"	Cem.	987.24
Home st., Liberty st., west- erly.....	424	10"	Clay	302.25
Penacook ave., easterly...	246	10"	Clay	185.02
				487.27
Homer st., State st., south- erly.....	31 464	12" 10"	Clay Clay	186.81
Horace st., Dickinson st., northerly.....	363 411	12" 10"	Clay Clay	
Howard st., Main st., west- erly.....	344 321	15" 12"	Clay Clay	837.22
Water st., easterly.....	276	12"	Cem.	
	30	12"	Clay	255.78
Water st., westerly.....	314	12"	Cem.	43.40
	31	12"	Clay	326.98
				43.47
				1,506.85
Hubbard ave., Main st., easterly.....	257 321	15" 12"	Clay Clay	630.47
Hunt terrace, Allen st., northerly.....	304	10"	Clay	
Hunter place, State st., northerly.....	350 313	12" 10"	Clay Clay	602.72

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Huntington st., Birnie ave., easterly.....	300	12"	Clay }	\$416.95
	300	10"	Clay }	
Hyde ave., Fisk ave. to Plainfield st.....	301	15"	Clay }	712.99
	300	12"	Clay }	
	219	10"	Clay }	
Ingersoll grove, Worthing- ton st., northerly.....	782	12"	Cem. }	\$1,038.85
	218	8"	Clay }	
Florida st., easterly.....	146	10"	Clay	90.97
Bowdoin st., easterly....	132	10"	Clay	106.53
				<hr/> 1,236.35
Ionia st., State st., northerly	720	10"	Clay	445.92
Irrington st., Sumner ave. to Morningside Park..	300	12"	Clay }	180.95
	400	10"	Clay }	
James st., Cedar st., north- erly.....	289	15"	Cem. }	924.38
	534	12"	Cem. }	
Jefferson ave., North Main to Chestnut st.....	299	20"	Clay }	1,663.86
	299	18"	Clay }	
See private ways also.	276	15"	Clay }	492.50
	60	12"	Clay }	
	414	12"	Cem.	37.89
	78	6"	Clay	<hr/> 2,194.25
John st., Fulton to Plain- field st.....	652	12"	Cem.	420.18
Johnson st., Dickinson st. to Pasadena ave.....	1,964	18"	Clay	3,756.87
Johnson st., I. O., Main to South st.....	500	20"	Clay }	1,254.26
	463	18"	Clay }	
Keith st., Belmont ave. to Dickinson st.....	551	12"	Clay }	1,106.40
	551	10"	Clay }	
*Dickinson st., southerly.	350	15"	Clay }	823.06
	301	12"	Clay }	
	186	10"	Clay }	<hr/> 1,929.46
Kensington ave., Oakland to Earl st.....	451	18"	Clay }	1,179.27
	402	15"	Clay }	
Earl st. to Pasadena ave..	567	12"	Clay }	605.63
	260	10"	Clay }	
				<hr/> 1,784.90
Kenwood park, Belmont ave., northerly.....	130	12"	Clay }	139.96
	1,127	10"	Clay }	
Kenwood terrace, Belmont to Sumner ave.....	218	12"	Clay }	305.66
	197	10"	Clay }	

\* Surface drainage only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Kibbe ave., Summer to Worthington st.....	260	18"	Clay	\$552.92
*Kibbe Hollow, northerly of Worthington st.....	447	24"	Clay	.....
King st., Walnut to Hancock st.....	504	15"	Cem.	\$921.37
	441	12"	Cem.	
Hancock to Logan st....	311	20"	Clay	2,650.91
	399	18"	Clay	
	686	15"	Clay	
	238	12"	Clay	701.29
	239	10"	Clay	
*Westford to Wilbraham ave.....	427	10"	Clay	321.81
				4,595.38
Knox st., Mill river to Wind- sor st.....	1,303	24"	Clay	3,132.56
Ladd st., Eastern ave. to Logan st.....	243	15"	Clay	424.92
	304	12"	Clay	
Lafayette st., St. James ave. to Amherst st.....	582	12"	Clay	545.34
	21	10"	Clay	
Larkspur st., White st., easterly.....	299	15"	Clay	484.95
	304	12"	Clay	
	101	10"	Clay	
Laurel st., Conn. river to Plainfield st.....	888	18"	Cem.	2,303.07
	60	18"	Clay	282.48
	20	18"	Clay	44.62
Laverne ave., Bellevue to Marengo ave.....	211	10"	Clay	2,630.17
Lebanon st. (see Hancock)	.....	3'-6"x5'-3"	Brick	.....
Hancock st., westerly.....	158	2'-0"x3'-0"	Brick	1,495.77
Hancock to Eastern ave..	606	18"	Cem.	1,842.70
	816	15"	Cem.	
				3,338.47
Ledyard st., Armory st., northwesterly.....	478	10"	Clay	321.39
Lenox st., Sumner ave., southerly.....	465	10"	Clay	53.58
Lester st., Sumner ave. to Vermont st.....	286	12"	Clay	324.11
	279	10"	Clay	
Lexington ave., Chestnut to Massasoit st.....	668	12"	Clay	546.52
Massasoit st., easterly...	145	2'-0"x3'-0"	Con.	594.63
				1,141.15

\* Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Leyfred terrace, Belmont ave., northerly.....	300 317	18" 15"	Clay } Clay }	\$957.30
Liberty st., Garden brook to Main st.....	118	12"	Clay	\$179.19
Garden brook to Chestnut st.....	70 172 967 171	1'-6"x1'-7" 12" 15" 8"	Brick Cem. Cem. Cem.	1,101.78
Chestnut to Webster st...	784 659 684	2'-4"x3'-6" 1'-10"x2'-9" 2'-2"x3'-3"	Brick Brick Brick	9,123.49
Webster to Armory st. ...	366 1,282 317 449	3'-0"x4'-6" 2'-2"x3'-3" 1'-10"x2'-9" 2'-2"x3'-3"	Brick Brick Brick Brick	5,383.15 2,539.81
Armory to Home st.....	1,194 1,103 714	24" 18" 15"	Clay Clay Clay	5,227.99
Lillian st., Oak st., easterly..	297	12"	Clay	23,555.41 232.47
Lincoln st., Magazine to Federal st.....	823	12"	Clay	676.54
Linden st., Chestnut to Cass st.....	470 862	18" 15"	Cem. } Cem. }	1,318.15
Litchfield st., Belmont ave. to Fairfield st.....	159	15"	Clay	335.11
Garfield st., northerly ...	69	6"	Clay	7.10
Locust st., York to Mill st.	84 364 686	3'-0"x4'-6" 2'-9"x4'-1½" 2'-6"x3'-9"	Brick Brick Brick	342.21 6,804.18
Logan st., Collins st., south- erly.....	97	10"	Clay	109.36
Collins to Ladd st.....	183	10"	Clay	140.36
Ladd st., northerly.....	88	10"	Clay	67.64
Granville st., northerly ..	200	10"	Clay	169.04
Lombard st., Water st., east- erly.....	500	12"	Cem.	486.40 376.60
Longfellow terrace, White st., westerly.....	246 200	12" 10"	Clay } Clay }	290.03

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Longhill st., submerged out- let.....</b>	26 290 28	18" 18" 18"	Clay W'd C-ir. }	\$5,387.70
<b>Conn. river to Washington boulevard .....</b>	1,310	24"	Clay	
<b>(See Washington boulevard)</b>	346	2'-4"x3'-6"	Brick	
<b>Washington ave., northerly</b>	399 512 160	15" 12" 10"	Clay Clay Clay }	1,027.66
<b>Sumner ave., southerly ..</b>	356	8"	Clay	
<b>Warner pl. to Sumner ave.</b>	423	10"	Clay	
<b>Main st. to Warner place.</b>	136 265 350 400 240 90	24" 18" 15" 12" 10" 2'-0"x3'-0"	Clay Clay Clay Clay Clay Con. }	2,608.25
				447.63
				<u>\$14,260.42</u>
<b>Loring st., Water st., easterly</b>	607 40	12" 12"	Cem. Clay	733.41 48.34
				781.75
<b>Lowell st., Conn. river to Plainfield st.....</b>	305 396 466 283	18" 15" 12" 10"	Clay Clay Clay Clay }	1,063.24
<b>Lyman st., Main to Chestnut st.....</b>	1,335	2'-0"x3'-0"	Brick	6,113.12
<b>Chestnut to Spring st.....</b>	418 302	15" 15"	Clay Cem.	1,783.33 695.83
				<u>\$8,592.28</u>
<b>Lyndale st., Belmont ave., northerly.....</b>	350 300 324	15" 12" 10"	Clay Clay Clay }	952.60
<b>Lyons st., I. O., Main st., northerly.....</b>	261	18"	Clay	389.58
<b>Madison ave., Central st., northerly.....</b>	250 287	12" 10"	Clay Clay }	737.57
<b>Magazine st., Worthington to Lincoln st.....</b>	682 249	18" 15"	Cem. Cem. }	1,211.05



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Magnolia terrace, east side, Summer to Spruceland ave.....</b>	620	10"	Clay	\$1,233.46
<b>west side, Summer to Spruceland ave.....</b>	621	10"	Clay	
<b>overflow connection be- tween east and west side Washington to Spruceland ave. ....</b>	62	8"	Clay	26.00
	362	24"	Clay	21.08
	602	12"	Clay	
				\$1,280.54
<b>Main st., Pecousic ave. to Longhill st.....</b>	191	2'-4"x3'-6"	Con.	1,077.51
<b>Mill river to Mill st.....</b>	258	10"	Clay	342.25
<b>Locust to Mill st.....</b>	385	15"	Clay	1,926.01
	394	12"	Clay	
<b>Mill st., southerly.....</b>	55	15"	Cem.	96.72
<b>York st. to B. &amp; A. R. R.</b>	56	7'-0" cir.	Brick	20,812.99
	1,772	6'-6" cir.	Brick	
	906	5'-6" cir.	Brick	
	990	5'-0" cir.	Brick	
	1,624	3'-4"x5'-0"	Brick	34,453.56
	864	2'-4"x3'-6"	Brick	
	263	12"	Clay	164.82
<b>Cypress to Emery st. ....</b>	298	15"	Clay	1,210.56
	270	12"	Clay	
<b>Emery st., southerly.....</b>	278	12"	Cem.	389.20
<b>Emery to Sargeant st. ....</b>	341	24"	Clay	2,539.81
	442	20"	Clay	
	480	18"	Clay	
	186	15"	Clay	
				63,013.43
<b>Main st., I. O., Chicopee river to Pine st.....</b>	2,321	2'-4"x3'-6"	Brick	7,636.81
<b>Pine to Cedar st.....</b>	500	18"	Cem.	870.78
	185	15"	Cem.	
	103	12"	Clay	128.49
<b>Cedar to Lyons st.....</b>	1,110	2'-0"x3'-0"	Brick	5,068.28
<b>Chicopee river through private land and Main st. to Beaudry st.....</b>	699	18"	Clay	1,530.17
	232	15"	Clay	
	212	10"	Clay	
<b>Parker st., westerly.....</b>	409	12"	Clay	448.86
<b>Lyons st., easterly.....</b>	205	24"	Clay	1,334.58
	245	18"	Clay	
	129	12"	Clay	
				17,017.97

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Malden st., Allen st., south- erly.....</b>	542 291 494	15" 12" 10"	Clay Clay Clay }	\$25.75
<b>Manhattan st., Eastern ave. to Walnut st.....</b>	290 645 205	15" 12" 10"	Clay Clay Clay }	862.70
<b>Maple st., State to Temple st.....</b>	315	18"	Clay	\$675.51
<b>Park to High st.....</b>	225	18"	Clay	51.55
<b>Union st., southerly.....</b>	515	18"	Cem.	505.21
	135	12"	Cem.	959.13
<b>Central st., southerly . . .</b>	33	18"	Cem.	160.95
	388	12"	Cem.	1,289.58
<b>Pine st., northerly.....</b>	784 195 522	12" 15" 12"	Clay Cem. Cem. }	1,093.44
				4,735.37
<b>Mapledell st., State to Burr st.....</b>	337 300 388	15" 12" 10"	Clay Clay Clay }	133.34
<b>Maplewood ter., Fort Pleas- ant ave., easterly.....</b>	682 329 178	15" 12" 10"	Clay Clay Clay }	22.21
<b>Marble st., Main st., easterly</b>	222 586 242	18" 15" 12"	Cem. Cem. Cem. }	1,248.12
<b>Marengo park, Belmont ave., easterly.....</b>	443 612 778	15" 12" 10"	Clay Clay Clay }	117.62
<b>Margaret st., Water st., westerly.....</b>	520	12"	Cem.	540.89
<b>Water st., easterly.....</b>	825 30	12" 12"	Cem. Clay	855.32 31.41
				1,427.62
<b>Marion st., Bay st., south- erly.....</b>	833	12"	Clay	915.66
<b>Chapin st., easterly.....</b>	94 319	10" 8"	Clay Clay }	25.89
				941.55



## SEWER SYS

NAME OF SEWER.	Length in Feet.
<b>Market st., State st., north- erly</b> .....	119
<b>Sanford st., southerly</b> ..	200
<b>Sanford st. to Harrison ave.</b> .....	301
<b>Harrison ave., southerly</b> ..	350
<b>Marlboro ave., State st. to Wilbraham road</b> .....	154
<b>Marshall place (see Melrose st.)</b> .....	300
<b>Mason place, Dickinson st., southerly</b> .....	449
<b>Mason st., State to Pease st.</b>	200
<b>Massachusetts ave., Wilbra- ham road, southerly</b> ..	276
<b>Westford circle, northerly</b>	349
<b>Massasoit place, Massasoit st., easterly</b> .....	359
<b>Massasoit st., Carew st., northerly</b> .....	300
<b>Lexington ave., southerly</b>	300
<b>Montmorenci st. to Lex- ington ave.</b> .....	298
<b>Montmorenci st., north- erly</b> .....	354
<b>Pratt st., southerly</b> ..	152
<b>Mattoon st., Chestnut to Salem st.</b> .....	149
<b>Maynard st., State st. to Shattuck ave.</b> .....	356
<b>McKnight st., Catharine to Sherman st.</b> .....	87
<b>Catharine to Bowles st.</b> ..	431
<b>Bowles st. to Girard ave.</b> ..	400

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Mechanic st., Water st., westerly .....</b>	302	12"	Cem.	<b>\$205.25</b>
	20	8"	Clay	<b>72.99</b>
				<b>\$278.24</b>
<b>Medford st., Birnie ave., easterly.....</b>	390	12"	Clay	
	183	10"	Clay	367.29
<b>Melrose st., sewer between Hickory and Melrose st. Eastern ave. to Walnut st.</b>	429	18"	Clay	
	263	15"	Clay	
	558	10"	Clay	
<b>Marshall place, Eastern ave. to Walnut st.....</b>	415	10"	Clay	1,577.08
	169	8"	Clay	
<b>Cottage ave., Melrose st. to Marshall place.....</b>	74	12"	Clay	
<b>Merrick ave., King st., southerly.....</b>	275	12"	Cem.	48.50
	24	12"	Clay	29.26
				77.76
<b>Merwin st., North Main to Chestnut st.....</b>	774	15"	Clay	....
<b>Middlesex st., Wilbraham road, southerly.....</b>	296	15"	Clay	
	304	12"	Clay	580.26
<b>Mill river, intercepting sew- er, Mill river to Locust st.....</b>	370	5'-3" cir.	Brick	6,066.64
	691	4'-0" cir.	Brick	
<b>Locust to Hickory st.....</b>	587	4'-0" cir.	Brick	
	131	3'-6"x5'-3"	Brick	
	1,743	5'-9" cir.	Brick	42,706.00
	779	4'-3" cir.	Brick	
	1,611	3'-3" cir.	Brick	
<b>*in Mill and Hickory sts.</b>	833	2'-2"x3'-3"	Brick	9,355.23
<b>*Hickory st. to Gunn square brook by north- erly shore of Water- shops pond.....</b>	4,495	2'-2"x3'-3"	Brick	45,545.71
				103,673.58
<b>Mill st., Main st., easterly.</b>	236	8"	Cem.	75.45
<b>Locust to Pine st.....</b>	943	2'-6"x3'-9"	Brick	4,764.79
<b>Knox to Maple st.....</b>	352	18"	Clay	668.24
<b>Dickinson st., easterly..</b>	325	24"	Clay	619.85
				6,128.33

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	
Monmouth st., Dorchester st., northerly and east- erly.....	199	12"	Clay	\$21
	171	10"	Clay	12
Yale st., westerly.....	64	12"	Clay	4
	278	10"	Clay	28
Berkeley st., northwesterly	350	12"	Clay	23
Monroe st., Hancock st. to Eastern ave.....	611	18"	Cem. }	
	789	15"	Cem. }	
Eastern ave. to Colton st..	316	12"	Cem. }	
Monson ave., Greene st., northerly.....	200	8"	Clay	
Montmorenci st., Chestnut to Massasoit st.....	64	12"	Clay	7
	612	2'-10"x4'-5"	Con.	2,72
Montrose st., State to Burr st.....	338	15"	Clay }	
	217	12"	Clay }	
	329	10"	Clay }	
Moore ave., Plainfield st., westerly.....	299	12"	Clay }	
	435	10"	Clay }	
Mooreland ave., Carew st., northerly to Van Horn ave.....	601	18"	Clay }	
	301	15"	Clay }	
	299	12"	Clay }	
	212	10"	Clay }	
Morgan st., Garden brook to Main st.....	252	12"	Cem.	19
	25	15"	Cem.	4
Garden brook to North st.	634	18"	Clay	1,46
Morris st., Main st., easterly	915	2'-0"x3'-0"	Brick	2,94
	496	12"	Cem.	35
Mountainview st., Forest Park ave., easterly.....	297	12"	Clay }	
	297	10"	Clay }	
Mulberry st., Maple st., easterly and northerly .	426	15"	Clay }	88
	270	12"	Clay }	
	629	12"	Cem.	59
	246	10"	Clay	23
west from Ridgewood ter- race.....	144	15"	Clay	
Murray Hill ave., Liberty st., northerly.....	.....	.....	Clay	
Myrtle st., Card Factory	107	10"	Clay }	
Pond brook, northerly .	237	8"	Clay }	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
<b>Myrtle st., I. O., Main to</b>				
Worcester st. ....	377	24"	Clay	\$1,003.44
Worcester st., southerly.	378	10"	Clay	355.34
Berkshire st., southerly ..	180	10"	Clay	189.63
Hampshire to Essex st. . .	275	10"	Clay	310.44
				<u>\$1,858.85</u>
<b>Nelson ave., Greene st.,</b>				
northerly. ....	90	12"	Cem.	27.96
Lebanon to King st. ....	188	10"	Cem.	126.54
	67	10"	Clay	93.63
				<u>248.13</u>
<b>Nelson st., Nursery st.,</b>				
easterly. ....	308	24"	Clay	....
<b>New st., E. Court st., north-</b>				
erly. ....	237	12"	Cem.	213.02
	33	8"	Clay	14.18
Dwight st., westerly. ....	164	10"	Clay	203.79
				<u>430.99</u>
<b>Newland st., Plainfield st.,</b>				
westerly. ....	350	18"	Clay	1,735.99
	349	15"	Clay	
	251	12"	Clay	
<b>Newman st., Knox st., west-</b>				
erly. ....	175	12"	Cem.	11.49
<b>Noel ave., Mill st., south-</b>				
erly. ....	204	20"	Clay	569.64
	146	18"	Clay	
	146	18"	Clay	
<b>Norfolk st., Wilbraham road,</b>				
southerly. ....	300	15"	Clay	566.08
	300	12"	Clay	
	229	10"	Clay	
				<u>721.93</u>
<b>North st., Ferry st., north-</b>				
erly. ....	148	10"	Clay	223.34
Carew st., northerly. ....	190	8"	Cem.	84.88
Church to Grosvenor st..	68	18"	Cem.	157.13
Morgan to Ringgold st. . .	198	18"	Cem.	356.84
Osgood to Hebron st. ....	130	18"	Clay	426.85
	165	10"	Clay	
<b>Bancroft st. to Brookline</b>				
ave. ....	302	18"	Clay	411.55
<b>Bancroft st., northerly . .</b>				
	153	12"	Cem.	217.15
	64	12"	Clay	
Jefferson ave., northerly. .	233	8"	Clay	197.21
Calhoun st., northerly . .	256	8"	Clay	48.13
Waverly to Grove st. . .	362	12"	Clay	302.86
Harriet st., southerly . . .	86	8"	Clay	....
Harriet st., northerly . . .	150	10"	Clay	106.43
				<u>2,532.37</u>

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	
Northampton ave., Wilbra- ham road, southerly . .	1,101	12"	Clay	\$83
Gunn square, northerly . .	126	10"	Clay	10
Gunn square to King st. . .	249	12"	Clay	32
	202	10"	Clay	
North Church ave., Cook's ave., easterly . . . . .	209	10"	Cem.	}
Cook's ave., westerly (for cost see Cook's ave.) . . .	133	10"	Cem.	
No. Main st., Morgan st., southerly . . . . .	232	8"	Clay	20
Morgan st., northerly . . .	173	8"	Clay	9
Osgood st., southerly . . .	199	10"	Clay	64
Arch to Osgood st. . . . .	730	15"	Cem.	71
*Arch st. to Jefferson ave. .	185	2'-2"x3'-3"	Brick	97
Jefferson ave. to Grove st. .	359	24"	Clay	2,56
	420	20"	Clay	
	285	15"	Clay	
	170	12"	Clay	
Grove st., northerly . . . .	551	1'-8"x2'-6"	Brick	1,87
Douglas to Harriet st. . . .	250	24"	Clay	47
Harriet to Waverly st. . . .	326	2'-4"x3'-6"	Brick	1,84
Douglas to Eagle st. . . . .	272	1'-10"x2'-9"	Brick	
Eagle st., northerly . . . . .	181	24"	Clay	53
Wason ave., southerly . . .	215	2'-0"x3'-0"	Brick	86
	349	1'-8"x2' 6"	Con.	1,57
Wason ave., northerly . . .	600	12"	Clay	46
Chicopee line, southerly . .	106	15"	Clay	18
Norwood st., Main to Han- over st. . . . .	1,051	12"	Cem.	
Nursery st., Liberty to Franklin st. . . . .	694	2'-8" cir.	Brick	2,28
Franklin st., northerly . . .	587	2'-8" cir.	Brick	
Oak st., Union to State st. .	741	2'-0"x3'-0"	Con.	3,09
Union to Tyler st. . . . .	220	18"	Clay	75
	268	15"	Clay	
Walnut to Tyler st. . . . .	177	18"	Clay	33
Oak st., I. O., Chicopee river to Main st. . . . .	684	4'-0" cir.	Con.	4,35
north from Main st. . . . .	179	15"	Cem.	68
	171	12"	Cem.	
Main st., southerly . . . . .	590	2'-2"x3'-3"	Brick	2,34
brick sewer to Hampshire st. . . . .	797	24"	Clay	1,63

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Hampshire st., southerly.	285	18"	Clay	\$1,562.43
	300	15"	Clay	
	400	12"	Clay	
Oak Grove ave., State to Center st.....	349	18"	Clay	\$10,551.57
	327	15"	Clay	....
	254	12"	Clay	
Center st., northerly.....	621	10"	Clay	
Bay st., southerly.....	350	18"	Clay	256.98
	350	15"	Clay	1,258.01
	301	12"	Clay	
	325	10"	Clay	
				1,514.99
Oakland st., Belmont ave., southerly.....	311	10"	Clay	330.77
Belmont ave. to Dickinson st.....	895	24"	Clay	2,218.71
Dickinson to Orange st.	254	24"	Clay	1,619.20
	350	18"	Clay	
	170	12"	Clay	
	218	8"	Clay	110.79
Allen to Orange st. ....	625	18"	Clay	1,428.06
	304	15"	Clay	
	193	12"	Clay	
	404	10"	Clay	468.60
Sumner ave. to Garfield st.	280	12"	Clay	
	221	10"	Clay	
				6,176.13
Olive st., Eastern ave., to Logan st.....	540	10"	Clay	439.17
Orange st., Oakland st., east- erly.....	583	8"	Clay	1,155.74
White st., westerly.....	381	12"	Clay	
	649	10"	Clay	
White st., easterly.....	924	10"	Clay	1,015.67
Orchard st., Plainfield st., westerly.....	325	20"	Clay	
	301	15"	Clay	
	297	12"	Clay	310.17
Orlando st., Sumner ave., southerly.....	494	10"	Clay	
	127	12"	Clay	
Belmont ave., northerly.	240	10"	Clay	396.28
	246	12"	Clay	
	193	10"	Clay	
				706.45
Orleans court, Orleans st., westerly.....	205	8"	Clay	....

~~SECRET~~ ~~SECRET~~ ~~SECRET~~

NAME OF STREET	Length in Feet	Wid- th	Sur- face	Value
Oriskany, Brook s. north- -city	2 111 121 130 211	10' 10' 10' 10' 10'	City City City City City	\$2,000 \$2,000 \$2,000 \$2,000 \$2,000
Oyster s. northern	100	10'	City	\$2,000
Peasdown ave. northern	211	10'	City	\$2,000
Grand st. Beacon to Summer ave.	177	10'	City	
Clapp st. Garden street to Main s.	157	10'	City	\$2,000
Garden street to North s.	240 240	20' 10'	City City	\$2,000 \$2,000
Oriskany st. River view re- -cross, northern	6 107 211	10' 10' 10'	City City City	\$2,000 \$2,000 \$2,000
Grant st. Union ave. southern	450	10'	City	
Page boulevard to James ave. northern	1,200	20'	City	
Palmer ave. Lucas s. southern	151 151 151	10' 10' 10'	City City City	\$2,000 \$2,000 \$2,000
Park st. Main to Willow st.	195	20'	City	\$2,000
Willow to Main s.	200 200	20' 10'	City City	\$2,000 \$2,000
Partner st. to E. Lincoln cross to Main s.	121 121 121	20' 10' 10'	City City City	\$2,000 \$2,000 \$2,000
Main s. southern	1,000	20'	City	\$2,000
Lower point to E. & E. R.R.	1,000	10'	City	\$2,000
Parkside ave. Lacey st. to Van Hook ave.	150 150 150 200	10' 10' 10' 10'	City City City City	\$2,000 \$2,000 \$2,000 \$2,000
Parkwood st. Summer ave. southern	157 210	20' 10'	City City	\$2,000 \$2,000
Peasdown st. Vine st. southern	150 200	20' 10'	City City	\$2,000 \$2,000

Training only.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Pasco st., I. O., Essex st., southerly.....	724	10"	Clay	\$607.80
Patton st., Garden brook to Main st.....	214	10"	Clay	\$173.73
Garden brook, easterly...	352	18"	Clay	1,572.67
	349	15"	Clay	
	537	12"	Clay	
				1,746.40
Peabody lane, Willow st., westerly.....	292	10"	Clay	332.17
Pearl st., Chestnut to Spring st.....	514	24"	Clay	1,792.62
	447	20"	Clay	
Spring st., easterly.....	190	1'-6" cir.	Brick	
				96.16
				1,888.78
Pease st., Catharine to Bowles st.....	250	12"	Clay	15.05
Pecousic ave., Mill river to Main st.....	352	2'-8"x4'-0"	Con.	2,155.17
Penacook ave., Governor to Home st.....	106	12"	Clay	76.42
Pendleton ave., Walnut to Hancock st.....	287	18"	Cem.	1,663.94
	524	15"	Cem.	
	429	12"	Cem.	
Hancock st. to Eastern ave.....	600	18"	Cem.	1,494.53
	793	15"	Cem.	
				3,158.47
Phoenix st., Liberty st., easterly.....	236	18"	Clay	840.32
	250	15"	Clay	
	89	10"	Clay	
Pine st., Mill to Cedar st.	740	2'-6"x3'-9"	Brick	13,659.54
	1,529	3'-6"x5'-3"	Brick	
	500	3'-10"x5'-9"	Brick	
Cedar to Walnut st.....	62	18"	Cem.	1,781.65
	884	15"	Cem.	
	631	12"	Cem.	
				15,441.19
Pine st., I. O., Main st., easterly.....	1,896	24"	Clay	4,170.03
Pine st. court, Pine st., easterly.....	348	10"	Cem.	266.39



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Pineywoods av., Washington boulevard, northeast'ly	334	15"	Clay }	
	263	12"	Clay }	....
Magnolia terrace, westerly	350	10"	Clay	\$25.62
Magnolia terrace to Wash- ington road.....	343	20"	Clay }	
	404	12"	Clay }	....
Washington road to Forest Park ave.....	341	12"	Clay	....
				\$25.62
Plainfield st., Sargeant to Fulton st.....	414	18"	Clay }	
	537	15"	Clay }	
	456	12"	Clay }	2,525.13
	244	10"	Clay }	
Washburn to West st....	154	12"	Clay }	
	203	10"	Clay }	427.50
Washburn to Roseland st.	331	2'-8"x4'-0"	Brick	1,555.00
	303	2'-6"x3'-9"	Brick	2,367.93
	287	2'-4"x3'-6"	Brick }	
	294	2'-2"x3'-3"	Brick }	4,518.58
Rowland to Division st..	648	2'-2"x3'-3"	Con.	3,402.82
	299	24"	Clay }	
	208	15"	Clay }	1,419.29
Rowland st. to Talcott ave.....	288	24"	Clay }	
	299	20"	Clay }	1,208.95
Talcott ave., northerly...	216	10"	Clay	158.46
Wason to Demond ave...	304	24"	Clay }	
	249	20"	Clay }	1,277.68
	53	18"	Clay }	
				18,861.34
Pleasant st., Bay st., south- erly.....	296	12"	Cem.	249.74
Plymouth st., Fulton st., easterly.....	375	10"	Clay	196.59
Pomona st., Sumner ave., northerly.....	580	12"	Clay	459.94
	297	10"	Clay	204.92
				664.86
Portland st., Birnie ave., easterly.....	251	12"	Clay }	
	224	10"	Clay }	351.35
Portsmouth st.....	212	12"	Clay	253.65
Pratt st., Chestnut to Marvin st.....	350	15"	Clay }	
	299	12"	Clay }	869.53

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Prescott st., Belmont ave., northerly .....	340	10"	Clay	\$195.22
Prince st., King to Lebanon st.....	329	12"	Cem.	333.15
Princeton st., Bay to Am- herst st.....	103	18"	Cem.	\$289.08
	689	18"	Clay	724.15
	151	15"	Clay	177.72
Yale to Vassar st.....	665	12"	Cem.	....
St. James ave. to Cornell st.....	298	12"	Cem.	195.52
				<hr/> 1,386.47
<b>Private ways and private lands:</b>				
Armory Hill sewer from Armory st., through pri- vate grounds east of Ar- mory st. to Worthington st.....	150 900 249	2'-5"x3'-7½" 2'-8"x4'-0" 2'-1"x3'-1½"	Brick Brick Brick	5,318.04
Card-factory Pond, Wood- worth ave., westerly be- tween High and State sts.....	751	12"	Cem.	408.75
in front and around High school.....	492	24"	Clay	848.26
High school to State st..	88	24"	Clay	192.35
				<hr/> 1,449.36
Cemetery brook, Morris st., easterly, north of Central st.....	174	24"	Clay	569.59
Chester to Hancock st...	218	8"	Clay	....
Garden brook sewer, north from Liberty st. to B. & M. R. R. via Arch st. about 300 feet east of Main st.....	2,936 766 1,303 236	5'-6" cir. 5'-0" cir. 4'-6" cir. 3'-0"x4'-6"	Brick Brick Brick Brick	47,577.34
Worthington st., north- easterly to Lyman st., thence via Railroad land to Armory st.....	3,274 952	4'-7½" cir. 4'-1" cir.	Brick Brick	
				<hr/> 29,761.32
				<hr/> 77,338.66
Hickory to Melrose st. (see Melrose st.)	....	18"	Clay	....

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Jefferson ave., passage way in rear of lots on south side.....	135 518	2'-0"x3'-0" 12"	Brick Cem.	..... \$364.84
Main to Dale st., between Hubbard ave. and Wil- liam st.....	655	12"	Cem.	441.92
Passage way, Ferry to Liberty st., 80 ft. east of Main st.....	210	12"	Clay	402.70
Potter place, State st., northerly.....	396 301 274	15" 12" 10"	Clay Clay Clay }	.....
Sewer in ave. Hampden st. southerly, near Water st.....	111	12"	Clay	147.14
Springfield st. and Glen- wood, via Atwater Glen	677 598 389 1,292 40 16 1,294	3'-6" cir. 3'-3" cir. 4'-3" cir. 3'-0" cir. 2'-0" cir. 2'-10"x4'-3" 24"	Brick Brick Brick Brick Brick Brick Clay }	14,614.89  3,889.98 18,504.87
Prospect st., Chestnut to Massasoit st.....	218 199 196	18" 15" 12"	Clay Clay Clay }	623.53
Massasoit st., easterly...	325 423	12" 10"	Clay Clay }	802.39 1,425.92
Pynchon st.....	950	2'-0"x3'-0"	Brick	3,108.02
Quebec st., I. O., Lyons st., easterly.....	209	15"	Clay	402.82
Queen st., Walnut to Han- cock st.....	634	12"	Cem.	634.22
Quincy st., Oak to Stebbins st.....	860	12"	Cem.	651.15
Hancock to Stebbins st...	522	12"	Cem.	549.58
Hancock st. to Eastern ave.....	637 765	18" 15"	Cem. Cem. }	1,766.39
Colton st. to Eastern ave.	208	10"	Clay	156.87
				3,123.99

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Railroad st., Water st., easterly .....	351	12"	Clay	\$490.75
Randolph st., Maplewood terrace, easterly .....	250 251	12" 10"	Clay Clay }	22.96
Ranney st., Wilmont st., southerly .....	85	10"	Clay	\$96.04
Wilmont st., northerly...	200	10"	Clay	151.76
Johnson st., northerly...	301	12"	Clay	426.13
	264	10"	Clay }	
Kensington ave., north- erly .....	206	10"	Clay	149.18
				823.11
Rapalus ave., I. O., Parker st., southerly .....	442	12"	Clay	429.47
Raymond ave., Carew st., northerly .....	277	10"	Clay	217.32
Reed st., State st., southerly	219	12"	Clay	134.79
	309	10"	Clay }	
Revere st., White st., south- erly .....	750 250 209	20" 10" 8"	Clay Clay Clay }	23.32
Richelieu court, Adams st., southerly .....	160 315	12" 10"	Clay Clay }	525.44
Richelieu place, Richelieu court, easterly .....	100	8"	Clay	....
Ridgewood place, Mulberry st., northerly .....	400 76	12" 10"	Clay Clay	29.46 101.95
				131.41
Ridgewood terrace, Mul- berry st., westerly .....	226	10"	Clay	....
Union st., southerly .....	137	10"	Clay	118.83
Rimmon ave., Greene lane to Weaver ramble .....	859	18"	Clay	....
Weaver ramble, north- erly .....	200	12"	Clay	....
Ringgold st., North to Chestnut st. ....	117 632	18" 12"	Cem. } Cem. }	744.53
Ripley place, St. James ave., southerly .....	230	10"	Cem.	163.48
Riverview st., Riverview ter- race to Chase ave. ....	63 310	10" 10"	Clay Clay	354.50
Forest Park ave., south- erly .....	299	10"	Clay	239.39
				593.89

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost
Riverview terrace, Fort Pleasant ave., easterly	298 322 105	15" 12" 10"	Clay Clay Clay	
Rochelle st., Wilbraham road, southerly	424	18"	Clay	
Rogers ave., I. O., Main st., southerly	97 152	15" 12"	Clay Clay	
Roseland st., Plainfield st., westerly	350 350 173	18" 15" 12"	Clay Clay Clay	
Rowland st., Conn. river to North Main st., including 630' in Douglas st.	579 51 1,247 1,330	5'-3" cir. 1'-8"x2'-6" 6'-6" cir. 6'-0" cir.	Brick Brick Brick Brick	
Rutland st., Wilbraham road to State st.	199	8"	Clay	
Rutledge ave., Main st., easterly	574	24"	Clay	
Sachem st., Dickinson st., northerly	330	10"	Clay	
Salem st., Pearl st., south and east	283 99 290	18" 15" 12"	Cem. Cem. Cem.	
*Sanford st.	536	3'-2"x4'-9"	Brick	
*Sargeant st., Fulton to Main (cost shown under Clinton st.)	920	4'-6"x6'-9"	Brick	
School st., Union to Mulberry st.	560	15"	Clay	\$620.95
Union st., northerly	258	10"	Clay	256.85
Scott st., White to Pomona st.	300 347	12" 10"	Clay Clay	
Searle place, Walnut st., easterly	178	10"	Clay	
Seventh st., Fulton to Main st.	830	12"	Cem.	
Sewer in avenue (see private ways).				
Sewer (see private ways).				
Sharon st., Garden brook to Main st.	209 151	15" 12"	Clay Clay	945.67
Garden brook, easterly	301 300 231 232	20" 18" 15" 12"	Clay Clay Clay Clay	2,355.50

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Shattuck st., Maynard st. to	200	10"	Clay	.....
Willard ave.....	143	8"	Clay	
Willard ave., easterly ....	50	8"	Clay	
Shefford st., Springfield st., westerly.....	293 350	12" 10"	Clay } Clay	\$601.41
Sheldon st., Birnie ave. to N. Main st.....	311 317	12" 10"	Clay } Clay	18.49
Sherman st., Bay to Claren- don st.....	175	12"	Cem. }	\$571.12
Bay to McKnight st.....	443	12"	Cem. }	
State to McKnight st.....	301	18"	Clay	1,314.14
	301	15"	Clay	
	544	12"	Clay	
				1,885.26
Shillingford st., Eastern ave. to Sheffield st....	640	12"	Clay	447.45
Silver st., Armory st., east- erly.....	302	15"	Clay	470.93
	297	12"	Clay	
	199	12"	Clay	
Smith st., Knox to Dorne st. Dorne st., westerly .....	107	10"	Clay	196.57 136.68
				333.25
Sorrento st., Sumner ave., northerly.....	325	12"	Clay	271.15
Grenada terrace, northerly	367	10"	Clay	
				209.65
				480.80
Spencer st., Sumner ave., southerly.....	282	12"	Clay	451.29
	315	10"	Clay	
Spring st., south from Ly- man st.....	281	15"	Cem. }	2,569.51
	130	12"	Cem. }	
Worthington to State st...	470	18"	Cem. }	
	640	15"	Cem. }	
	644	12"	Cem. }	
Worthington st., northerly	132	12"	Clay	87.28
Worthington to Summer st.....	183	5'-0" cir.	Brick }	
* .....	49	4'-3"x6'-0"	Brick }	1,498.24
				4,155.03
Springfield st., Atwater ter- race, northerly.....	892	20"	Clay	3,337.44
	360	18"	Clay	
	413	15"	Clay	
	286	12"	Clay	
	437	10"	Clay	

\* Segmental.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Springfield st. and Glen- wood (see private ways).				
Spruce st., Central st., northerly.....	600	12"	Cem.	\$609.90
Spruceland ave., Magnolia terrace, westerly.....	67	8"	Clay	.....
Beechwood ave., easterly..	242	8"	Clay	\$136.48
Beechwood ave., westerly.	299	8"	Clay	94.83
Longhill st., easterly.....	450	10"	Clay	410.40
				641.71
Stafford st., Armory st., westerly.....	402	10"	Clay	239.85
State st., Water st., westerly	70	12"	Cem.	45.27
	91	12"	Cem.	71.19
	82	12"	Clay	83.01
Water to Main st.....	907	18"	Clay	1,199.78
Main to Dwight st.....	636	18"	Clay	1,433.50
*Dwight st. to High school	29	2'-8"x4'-0"	Brick	4,897.66
	265	2'-2"x3'-3"	Brick	
	417	2'-0"x3'-0"	Brick	
At High school, connecting old with new.....	54	24"	Clay	161.88
High school to Elliott st..	305	2'-0" cir.	Brick	469.65
High school to Walnut st.	726	2'-0"x3'-0"	Con.	6,442.79
	306	2'-2" cir.	Con.	
	1,440	2'-0" cir.	Con.	
connecting new with old..	54	18"	Clay	1,678.37
Walnut to Oak st.....	250	18"	Clay	
	253	15"	Clay	
	348	12"	Clay	1,062.40
Federal st., easterly.....	695	2'-0" cir.	Brick	
	130	12"	Clay	274.35
Oak to Buckingham st....	2,110	18"	Cem.	2,848.93
Hancock to Sherman st..	1,147	3'-4"x5'-0"	Brick	13,555.85
Sherman to Chapin st....	492	3'-0"x4'-6"	Brick	
Chapin to Andrew st.....	726	3'-0"x4'-6"	Brick	
Andrew st. to Oak Grove ave.....	937	2'-10"x4'-3"	Brick	10,793.96
east from Oak Grove ave. to Cortland st.....	548	2'-4"x3'-6"	Brick	5,042.79
	283	2'-2"x3'-3"	Brick	
	352	2'-0"x3'-0"	Brick	
Cortland st., easterly ....	355	24"	Clay	4,586.74
	112	18"	Clay	
	3,399	12"	Clay	
				54,648.12

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Stearns square (west road- way), Bridge st., north- erly.....	172	12"	Clay	\$205.83
Stearns square (east road- way), Bridge st., north- erly.....	167	8"	Clay	\$67.00
Worthington st., southerly	148	12"	Clay	342.98
				409.98
Stebbins st., Union to State st.....	300 293	12" 10"	Clay } Clay }	596.89
Sterns terrace, Central st., northerly.....	393	12"	Clay	605.10
St. James ave., State st., northerly.....	191 467 123	18" 12" 10"	Clay } Clay } Clay }	906.01
Bay st. to Ripley place...	91	12"	Cem.	135.23
Florida st. to Ripley place	469	12"	Cem.	500.89
Florida st., northerly . . .	417	18"	Cem.	1,073.90
	300	12"	Cem. }	
Clarendon to Westminster st.....	248	15"	Cem.	404.60
Clarendon st., northerly ..	138	8"	Clay	64.82
Dartmouth to Harvard st.	385	2'-0"x3'-0"	Brick	2,738.53
Harvard to Princeton st. .	528	24"	Clay	1,587.44
Princeton st., northerly ..	308	18"	Clay }	
	249	15"	Clay }	965.55
	57	12"	Clay }	
Chicopee road to Page boulevard .....	127	24"	Clay	396.52
				8,773.49
Stockbridge st., Main st., easterly.....	777	18"	Cem.	1,084.57
Suffolk st., Wilbraham road, southerly.....	300 300 795	15" 12" 10"	Clay } Clay } Clay }	294.06 596.52
				890.58
Sullivan st., Armory st., easterly.....	395	12"	Clay	40.41
*Summer st., Spring to Ar- mory st.....	44	4'-3"x6'-0"	Brick }	
	† 1,344	4'-2"x6'-3"	Brick }	
	† 1,093	2'-10"x4'-3"	Brick }	24,048.88
	† 750	3'- 8"x5'-6"	Brick }	
Sumner ave., Fort Pleasant ave. to Longhill st.....	448 358	12" 10"	Clay } Clay }	815.24

\* Segmental. † Elliptical.



## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Fort Pleasant ave. to Ran- dolph st.....	673	2'- 0"x3'-0"	Brick	\$7,968.46
Randolph st. to Washing- ton road.....	360	1'-10"x2'-9"	Brick	
Washington road to Forest Park ave.....	360	1'- 8"x2'-6"	Brick	
Forest Park ave. to Green- leaf st.....	367	1'- 6"x2'-3"	Brick	2,915.88
Greenleaf st. to Belmont ave.....	355	20"	Clay	
	851	18"	Clay	
	736	15"	Clay	
	272	12"	Clay	
	426	10"	Clay	37.49
Belmont ave., easterly...	100	8"	Clay	
*Dickinson to White st....	2,219	2'-8"x4'-0"	Brick	11,531.37
White st. to Castle ave....	565	2'-2"x3'-3"	Brick	2,391.46
	1,110	2'-2"x3'-3"	Con.	2,246.16
	739	15"	Clay	1,645.60
	879	12"	Clay	
				\$29,551.66
Sumner terrace, Sumner ave., northerly.....	252	12"	Clay	440.44
	220	10"	Clay	
†Sycamore st., Acorn to Bay st.....	899	8"	Clay	352.24
Sylvan ave., Belmont ave. to Fountain place.....	294	20"	Clay	1,136.42
	251	18"	Clay	
	249	15"	Clay	
Symonds ave., Worthington to Bridge st. (includes cost of Bond pl.).....	300	15"	Cem.	696.89
Talcott ave., Fisk ave. to Plainfield st.....	362	15"	Clay	549.57
	316	12"	Clay	
Taylor st., Main to Chestnut st.....	330	20"	Clay	2,179.92
	321	18"	Clay	
	197	15"	Clay	
	50	12"	Clay	
	341	12"	Cem.	51.79
				463.50
				2,695.21
Temple st., Maple to School st.....	304	15"	Clay	1,127.60
	300	12"	Clay	
	345	10"	Clay	
outlet into High school sewer.....	169	15"	Clay	171.71
				1,299.31
Tenth st., Garden brook, easterly.....	300	18"	Clay	1,256.39
	302	15"	Clay	
	421	12"	Clay	
	4	8"	Clay	

\* Elliptical.

† Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Terrence st., Union to State	374	12"	Clay	\$565.26
st.....	313	10"	Clay	
	48	10"	Cem.	
Thomas st., Birnie ave., easterly.....	451	10"	Clay	\$599.28
Thompson st., Worthington				338.41
st., southerly.....	603	12"	Cem.	638.27
St. James ave. to Bay st..	703	15"	Cem.	749.22
State to Bay st.....	852	12"	Cem.	653.12
Thorndyke st., Sumner ave., southerly.....	116	12"	Clay	2,040.61
Tracy st., Franklin st., southerly.....	14	10"	Clay	148.93
	262	10"	Clay	15.48
Trafton road, Dickinson st., westerly .....	351	18"	Clay	923.68
	460	15"	Clay	
	140	12"	Clay	
Trenton st., Dickinson st. to Commonwealth ave.	146	10"	Clay	125.74
Trillium st., White to Green- brier st.....	345	10"	Clay	216.74
Trinity terrace, Sumner ave. to Morningside park ..	300	12"	Clay	533.91
	416	10"	Clay	
	717	15"	Cem.	
Tyler st., Oak to Hancock st.	663	12"	Cem.	1,202.87
Hancock st. to Eastern ave.	601	18"	Cem.	815.47
	795	15"	Cem.	718.71
Eastern ave., easterly . . .	251	10"	Cem.	199.75
Union st., submerged outlet.	165	24"	Wood	1,604.45
	48	24"	C. Iron	391.23
Conn. river to Main st....	1,610	3'-4"x5'-0"	Brick	8,806.18
	53	2'-0"x3'-0"	Brick	
	*718	3'-2"x4'-9"	Con.	
Main to Oak st.....	951	2'-8" cir.	Con.	13,447.59
	1,021	2'-3" cir.	Con.	
	1,504	2'-4"x3'-6"	Con.	
Oak to Orleans st.....	404	15"	Cem.	7,638.58
Hancock to Stebbins st...	261	2'-0"x3'-0"	Brick	467.96
	335	1'-10"x2'-9"	Brick	2,307.33
Stebbins to Orleans st. . .	428	20"	Clay	737.72
Hancock st. to Eastern ave.	600	18"	Cem.	1,535.40
	800	15"	Cem.	
	248	10"	Clay	
Eastern ave., easterly . . .				152.56
Vassar st., Harvard st., northerly.....	550	12"	Cem.	37,089.00
Ventura st., Sumner ave., northerly.....	351	10"	Clay	153.37
Grenada terrace, northerly	341	10"	Clay	289.51
				223.28
				512.79

\* Elliptical.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in feet.	Size in inches.	Material.	
Wentworth St. Collector 1	35	12	Cast	
St. Lawrence	37	12	Cast	
	12	12	Cast	
Wentworth St. Collector 2	33	12	Cast	857.2
St. Lawrence	31	12	Cast	810.8
Wentworth St. Collector 3	37	12	Cast	
St. Lawrence	37	12	Cast	884.1
	32	12	Cast	831.1
Wentworth St. Collector 4	34	12	Cast	
St. Lawrence	30	12	Cast	
	34	12	Cast	
Wentworth St. Collector 5	36	12	Cast	912.8
St. Lawrence	30	12	Cast	
Wentworth St. Collector 6	30	12	Cast	1100.0
St. Lawrence	30	12	Cast	
Wentworth St. Collector 7	21	12	Cast	
St. Lawrence	21	12	Cast	
Wentworth St. Collector 8	6	12	Cast	81.2
St. Lawrence	22	12	Cast	410.3
Wentworth St. Collector 9	27	12	Cast	48.6
St. Lawrence	55	12	Cast	702.4
	7	12	Cast	21.5
Wentworth St. Collector 10	11	12	Cast	106.7
St. Lawrence	33	12	Cast	88.4
Wentworth St. Collector 11	24	12	Cast	96.5
St. Lawrence	24	12	Cast	211.3
Wentworth St. Collector 12	5	12	Cast	7.1
St. Lawrence	103	12	Cast	922.5
Wentworth St. Collector 13	35	12	Cast	
St. Lawrence	41	12	Cast	
Wentworth St. Collector 14	41	12	Cast	
St. Lawrence	41	12	Cast	
Wentworth St. Collector 15	50	12	Cast	
St. Lawrence	19	12	Cast	
	9	12	Cast	31.8
Wentworth St. Collector 16	44	12	Cast	
St. Lawrence	175	12	Cast	

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Washington boulevard, Longhill st. to Piney- woods ave.....	304 823 308 200 242 330	2'-4"x3'-6" 2'-2"x3'-3" 18" 15" 12" 10"	Brick Brick Clay Clay Clay Clay	\$5,032.68   868.79  \$5,901.47
Washington road, Sumner ave., southerly.....	460	10"	Clay	56.78
Pineywoods ave., north- erly.....	141 281	10" 10"	Clay Clay	149.77 .... 206.55
Wason ave., Conn. river to Plainfield st.....	451	3'-10"x5'-9"	Brick	16,610.72
Plainfield st. to Fisk ave.	1,051	3'- 4"x5'-0"	Brick	
Fisk to Birnie ave.....	634	3'- 2"x4'-9"	Brick	
Birnie ave. to North Main st.....	247	2'- 0"x3'-0"	Brick	
Water st., Gardner to Lor- ing st.....	474	1'-10"x2'-9"	Brick	1,219.79
Loring st., northerly....	345	12"	Cem.	237.38
Union to Margaret st....	721	2'- 0"x3'-0"	Brick	2,367.61
Union st., northerly.....	868	18"	Cem.	
Elm to State st.....	275	18"	Cem.	508.75
Elm to Pyncheon st.....	43	2'- 0"x3'-0"	Brick	198.00
	498	2'- 6"x3'-6"	Brick	2,949.29
Pyncheon st., northerly ...	257	18"	Cem.	404.44
	329	15"	Cem.	460.60
	61	12"	Cem.	85.40
Worthington st., southerly	209	10"	Clay	333.54
Worthington to Hampden st.....	327	15"	Cem.	457.80
Hampden to Railroad st.	321	12"	Clay	638.58 9,861.18
Waverly st., North Main to Chestnut st.....	473 487	20" 10"	Clay Clay	1,268.03
Weaver ramble, Rimmon ave., westerly and northerly.....	480	12"	Clay	
Webster st., Liberty to Franklin st.....	601	12"	Clay	505.99
Welcome place, Bay st., northerly.....	238	8"	Clay	17.84

## SEWER SYSTEM—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Material.	Cost.
Wellesley st., St. James ave. to Cornell st. ....	236 224	12" 10"	(Clay)	
Wellington ave., Wilbraham road, southerly .....	287 244	15" 12"	(Clay)	
Wendell ave., Main st., east- erly .....	291 458	10" 15"	(Clay)	
West Alford st., Summer ave. to Davison ave. ....	153 268 560 800 412	24" 20" 18" 15" 12"	(Clay)	
Westernview st., Forest Park ave., westerly .....	138 138	12" 10"	(Clay)	
Westford ave., Wilbraham road, southerly .....	300 300 350 841	15" 12" 10" 12"	(Clay)	\$676.26
*Westford circle to Kings st.			(Clay)	454.26
Westminster st., Bay & State st. ....	80 80 20	15" 12" 10"	(Clay)	705.11
St. James ave., southerly	71	12"	(Cen.)	794.10
White st., Allen to Orange st.	74 67 27	24" 20" 18"	(Clay)	1,177.54
Orange st. to Dawson ave.	388 291	15" 15"	(Clay)	1,401.97
Gordon st. to Dawson ave.	19	10"	(Clay)	382.17
Gordon st., southerly	698 207	15" 8"	(Clay)	2,122.71
Summer ave. to Lawrence st. ....	1,296	24"	(Clay)	671.32
Summer ave. to Trilium st. ....	1,028 16 32	20" 18" 12"	(Clay)	1,838.17
Belmont ave. to Trilium st. ....	23 19 210	24" 12" 10"	(Clay)	2,800.77
Belmont ave. to Eleanor road	37	24" x 40"	(Cen.)	1,008.39
Whiting st., Plummer st. westerly	18	18"	(Clay)	1,874.11
Whitney ave., Water st. westerly	450	12"	(Cen.)	

\*Sanitary sewer.

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Whittier ave., Sumner ave. to Longfellow terrace .	301 299 301 221	18" 15" 12" 10"	Clay Clay Clay Clay	\$1,261.63
Wight place, Water st., east- erly.....	175	10"	Clay	
Wilbraham ave., Wilbraham road, southerly.....	1,125	12"	Clay	
Alden to Beverly st.....	999 1,180	10" 8"	Clay Clay	
Wilbraham road, State st., easterly.....	248	12"	Cem.	157.79
State st. to Northampton ave.....	1,451	2'-0"x3'-0"	Brick	6,198.76
Northampton ave. to Bristol st.....	472 476 478 473 254 256 263 405	2'-6"x3'-9" 2'-4"x3'-6" 2'-2"x3'-3" 2'-0"x3'-0" 1'-10"x2'-9" 1'-8"x2'-6" 20" 12"	Brick Brick Brick Brick Brick Brick Clay Clay	8,970.16
Bristol st., easterly .....				859.35
Wilcox st., Water st., east- erly.....	548 327	15" 12"	Cem. Cem.	1,000.75
Water st., westerly.....	463	12"	Cem.	205.76
Willard ave., State st., northerly.....	282 300 241	18" 15" 12"	Clay Clay Clay	785.26
Shattuck ave., southerly..	215	8"	Clay	.....
William st., Water to Main st.....	875 32	12" 12"	Cem. Clay	918.26 125.28
Main to Dale st.....	351	12"	Clay	906.35
Water st., westerly.....	288 76 425	10" 15" 12"	Clay Cem. Cem.	459.79
Willow st., Cross to State st.	413	12"	Clay	791.42
Cross to Park st.....	265	12"	Clay	378.17
Union to Park st.....	216	18"	Cem.	325.32
Union st. to Hubbard ave.	219	10"	Clay	204.39
Wilmont st., Dickinson to Revere st.....	349 450 386	18" 15" 12"	Clay Clay Clay	1,699.30 1,557.40

## SEWER SYSTEM.—CONTINUED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Co
Winchester st. ....	424	12"	Clay	
Windsor st., Knox st., west- erly .....	308 266	12" 10"	Clay Clay	
Winthrop st., Main st., east- erly .....	52 141 310 230	18" 15" 15" 12"	Cem. Cem. Clay Clay	\$220.81 1,045.76
Wolcott st., Armory st., northerly .....	220 206	10" 10"	Clay Clay	192.49
Woodside terrace, Belmont ave., northerly .....	451	10"	Clay	321.97
Forest Park ave., north- erly .....	307	10"	Clay	
Worcester ave., Plainfield st. to Fisk ave. ....	854	15"	Cem.	
Worcester st., I. O., Myrtle to Chestnut st. ....	4 290	24" 20"	Clay Clay	945.80
Chestnut to Holly st. ....	382	2'-0"x3'-0"	Brick	1,283.00
Oak st., easterly .....	670	1'-10"x2'-9"	Brick	2,398.09
Pine st., easterly .....	275 212 546 224 349	12" 10" 20" 18" 15"	Clay Clay Clay Clay Clay	542.93 801.67 344.66 510.13
Worthington st., submerged outlet .....	194 22	24" 24"	Wood C. Iron	1,883.04 176.25
*Conn. river to Main st. ....	1,038	5'-7"x7'-0"	Brick	
*Main to Dwight st. ....	821	5'-4"x7'-0"	Brick	33,410.12
Dwight to Garden brook ..	566	4'-0"x6'-0"	Brick	
Garden brook to Spring st.	738	4'-3" cir.	Brick	
Spring st., branch north ..	35	5'-0" cir.	Brick	4,361.35
Spring st., branch south ..	47	2'-0"x3'-0"	Brick	
Spring st., easterly .....	40 242 251	18" 15" 12"	Cem. Cem. Cem.	614.35
Autumn st., westerly .....	113	12"	Cem.	118.78
near Sacketts ave. ....	145	10"	Cem.	111.47
West brook, easterly .....	329 217	15" 12"	Clay Clay	1,110.54
West brook to Autumn st.	231	15"	Clay	727.56
Sacketts ave., westerly ..	98	12"	Clay	207.28
Sacketts to Kibbe ave. ....	337	12"	Cem.	335.37
Kibbe ave. to Federal st.	794	15"	Clay	826.90
Kibbe hollow, westerly to Magazine st. ....	167	18"	Clay	381.28

\* Elliptical.

SEWER SYSTEM.—CONCLUDED.

NAME OF SEWER.	Length in Feet.	Size.	Ma- terial.	Cost.
Kibbe hollow to Bowdoin st.....	833	2'-2" cir.	Con.	\$2,357.86
near Magazine to Bow- doin st.....	248	2'-8"x4'-0"	Brick	20,646.21
	354	2'-1"x3'-1½"	Brick	
Bowdoin st. to St. James ave.....	359	3'-4"x7'-2"	Brick	
	1,307	3'-4"x6'-9"	Brick	\$67,268.36
X Court, Dickinson st., west- erly and southerly.....	34	10"	Clay	84.24
	192	10"	Clay	19.05
				103.29
Yale st., Dartmouth to	350	24"	Clay	1,770.13
Princeton st.....	359	18"	Clay	
	233	15"	Clay	
Princeton st., northerly ..	712	12"	Clay	452.46
				2,222.59
York st.....	1,203	7'-0" cir.	Brick	13,912.27
Total.....	682,242			\$1,564,474.68

NOTE.—Sewers constructed by the city on private land or ways are indexed under Private ways.



# RECAPITULA

DESCRIPTION.	Length in Feet.
Segmental .....	93
Elliptical shaped.....	1,038
"    "    .....	821
"    "    .....	1,095
"    "    .....	1,949
"    "    .....	1,170
"    "    .....	1,040
"    "    .....	2,340
"    "    .....	1,746
"    "    .....	830
"    "    .....	536
"    "    .....	819
"    "    .....	1,093
"    "    .....	2,506
"    "    .....	5,778
"    "    .....	417
Egg shaped.....	566
"    "    .....	1,131
"    "    .....	1,074
"    "    .....	3,512
"    "    .....	359
"    "    .....	1,307
"    "    .....	8,787
"    "    .....	1,056
"    "    .....	2,877
"    "    .....	953
"    "    .....	364
"    "    .....	2,516
"    "    .....	4,818
"    "    .....	498
"    "    .....	150
"    "    .....	8,636
"    "    .....	8,688
"    "    .....	603
"    "    .....	18,874
"    "    .....	4,921
"    "    .....	2,432
"    "    .....	917
"    "    .....	669
Circular.....	3,017
"    .....	3,019
"    .....	1,330
"    .....	1,743
"    .....	3,842
"    .....	949
"    .....	2,257
"    .....	3,274
"    .....	1,762
"    .....	3,362

## RECAPITULATION BY SIZES.—CONCLUDED.

DESCRIPTION.	Length in Feet.	Size.	Material.
Circular .....	952	4'-1"	Brick and cem. mortar.
" .....	2,399	4'-0"	" " "
" .....	385	3'-9"	" " "
" .....	677	3'-6"	" " "
" .....	2,209	3'-3"	" " "
" .....	2,549	3'-0"	" " "
" .....	2,072	2'-8"	" " "
" .....	1,520	2'-0"	" " "
" .....	190	1'-6"	" " "
Elliptical .....	416	2'-10"x4'-3"	Brick-concrete.
" .....	245	3'-0"x4'-6"	" " "
Segmental .....	60	5'-0"x2'-1"	Concrete.
Elliptical .....	385	4'-10"x7'-3"	"
" .....	1,085	4'-2"x6'-3"	"
" .....	718	3'-2"x4'-9"	"
" .....	612	2'-10"x4'-5"	"
" .....	1,637	2'-10"x4'-3"	"
" .....	374	2'-8"x4'-0"	"
" .....	1,504	2'-4"x3'-6"	"
Egg shaped .....	352	2'-8"x4'-0"	"
" .....	1,365	2'-6"x3'-9"	"
" .....	191	2'-4"x3'-6"	"
" .....	3,081	2'-2"x3'-3"	"
" .....	1,702	2'-0"x3'-0"	"
" .....	349	1'-8"x2'-6"	"
Circular .....	1,004	4'-9"	"
" .....	684	4'-0"	"
" .....	1,940	2'-8"	"
" .....	1,484	2'-3"	"
" .....	1,139	2'-2"	"
" .....	1,440	2'-0"	"
" .....	34,612	24"	Clay pipe.
" .....	34,843	20"	" "
" .....	40,825	18"	" "
" .....	59,914	15"	" "
" .....	122,523	12"	" "
" .....	106,956	10"	" "
" .....	14,661	8"	" "
" .....	287	6"	" "
" .....	19,898	18"	Cement pipe.
" .....	33,451	15"	" "
" .....	59,278	12"	" "
" .....	4,285	10"	" "
" .....	822	8"	" "
" .....	120	24"	Cast-iron pipe.
" .....	28	18"	" "
" .....	726	24"	Wood pipe.
" .....	290	18"	" "
Miscellaneous shapes .....	919		Brick and cem. mortar.
Total .....	682,242		

## GENERAL CLASSIFICATION, 1912.

	Feet	Miles
Brick and cement mortar . . . . .	137,406	26.024
Brick-concrete . . . . .	661	.125
Concrete . . . . .	21,056	3.988
Clay pipe . . . . .	404,421	76.595
Cement pipe . . . . .	117,534	22.26
Cast-iron pipe . . . . .	148	.028
Wood pipe . . . . .	1,016	.193
Total . . . . .	682,242	129.213

## SUMMARY OF SEWERAGE STATISTICS.

(In form recommended by Sanitary Section of Boston Society  
Civil Engineers.)

*For the Year Ending December 1, 1912.*

## SPRINGFIELD, MASSACHUSETTS.

## GENERAL.

Population by census of 1910, . . . . .	88,926
Total area of city or town, . . . . .	38 square miles.
Area served by sewerage system, . . . . .	8 square miles.
Collection system, {	
For sewage only, . . . . .	1.92 miles.
For sewage and surface water, . . . . .	126.68 miles.
For surface water only, . . . . .	0.60 miles.
Method of disposal,—Gravity flow to Connecticut River.	

COLLECTION.

MAINS (EVERYTHING BUT HOUSE AND CATCH BASIN CONNECTIONS).

	For sewage only.	For sewage and surface water.	For surface water only.
2. Lineal feet brick, . . . . .		187,406	
3. " " concrete, . . . . .		21,717	
4. " " pipe, . . . . .	10,118	509,803	3,203
5. " " pipe extended during year, . . . . .	3,359	19,236	445
6. Number of inverted siphons, . . . . .		1	
8. Method of flushing: By connections with the water system.			
9. Method of cleaning: By scrapers and flushing.			
11. Number of direct connections with water mains for flushing, . . . . .	5	511	
12. Number of flushings of entire system during year, . . . . .		26	
13. Cost of flushing, per mile, . . . . .		\$16.64	
14. Cost of cleaning, per mile, . . . . .		\$17.27	
17. Number of storm overflows, . . . . .		16	
18. Method of ventilation: By manholes and well holes and through house stacks.			

HOUSE CONNECTIONS.

1. By whom made:	By Sewer Department as far as street line.
2. Sizes, . . . . .	6" and 8"
3. Number made during year, . . . . .	474
4. Lineal feet laid during year, . . . . .	About 13,000
7. Average cost per foot, connections made during year,	\$0.40

## FINANCIAL.

## CONSTRUCTION.

RECEIPTS.	EXPENDITURES.
Appropriation, . . . \$39,000.00	Collection works:—
	(a) Mains, . . . . \$39,908.11
	(b) House connections, . . . 5,014.93

## MAINTENANCE AND OPERATION.

Balance of previous year, \$ . . .	Administration, . . . \$3,422.41
	Tools and supplies and materials, . . . . 326.03
Appropriation, . . . 21,700.00	Repairs, . . . . 1,072.59
Transfers from	Automobile, Teams, City
other departments . . . 1,027.22	Yard and engineering, 3,103.65
Assessments, . . . . .	Cleaning sewers, . . . 2,231.61
Rentals, . . . . .	Cleaning catch basins, . . *932.15
Other sources, . . . . .	Flushing sewers, . . . 2,149.99
	Work chargeable, . . . 1,646.38
	Unclassified expenses, . . 608.43
	Balance, . . . . . 2,243.09
Total, . . . . . \$61,727.22	\$61,727.22
	Amount paid in interest,
	1912, . . . . . 8,195.00

\* Paid from Street Department funds.

**GENERAL.**

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Total cost of collecting mains to date, . . . . .	\$1,564,474.68
Bonded debt at date, . . . . .	240,000.00
Value of sinking fund at date, . . . . .	58,768.00
Average rate of interest on bonds, . . . . .	3½%
Proportion of cost of system paid for by abutters in fees,	50% +

Methods of assessing abutters and rate of assessment : —

Entrance fee of fifty (\$50) dollars for dwelling houses.

For buildings used for business purposes two (2) cents per square foot of area covered by the building for the two lower stories, and an additional charge of one half (½) cent per square foot of area covered by the building for each additional story.

